

Anti – Nitrotyrosine

Nitric Oxide (NO); Nitration

Cat No.	Size	Conjugation	Price	Application	Note
KH036	100 μ g/400 μ l	–	¥45,000	Not Tested	

Host	: Mouse	Specificity	: –
Isotype	: IgG1	Clonality	: Monoclonal Antibody (2H1)
Immunogen	: Nitrotyrosine-HSA		
Purity	: ProteinG Affinity Purified	Cross Reactivity	: Not tested

To elucidate the function of Nitric Oxide (NO) related signal transduction, we developed new monoclonal antibody to Nitrotyrosin (Clone No.2H1). There are two pathways, which is engaged in the signal transduction regarding vascular relaxation on endothelial cell. One is through activated guanylate cyclase that is cGMP dependent and another is cGMP independent pathway which requires reactive NO derived substance such as, peroxynitrate(ONOO⁻), N₂O₃, N₂O₄(NO₂). Recently, various functions of reactive NO derived substance has been identified for example regulating protein phosphorylation and inducing apoptosis. So, it is believed that reactive NO derived substance is involved in signal transduction among cells. Immunohistochemical study revealed that nitotyrosin residue is produced in some patient such as atherosclerosis, Alzheimer's disease, Parkinson's disease, and acute lung damage. This antibody is very useful for the research of reactive NO derived substance.

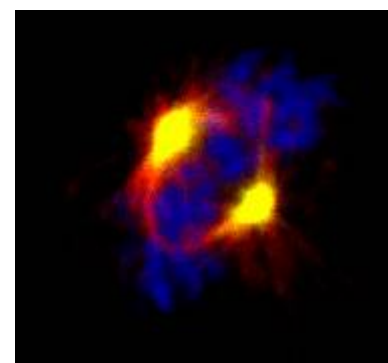
Anti – Aurora-A

AURKA; AIK; ARK1; AURA; BTAK; STK6; STK7; STK15; AURORA2

Cat No.	Size	Conjugation	Price	Application	Note
KR051	25 μ g / 100 μ l	–	¥49,000	WB, IH	

Host	: Rabbit	Specificity	: Human
Isotype	: –	Clonality	: Polyclonal Antibody
Immunogen	: GST-Human Aurora-A fusion protein (N terminal)		
Purity	: Antigen Affinity Purified	Cross Reactivity	: Not tested

Aurora-A (Aurora-A/STK-15/Aik) encoding a centrosome-associated kinase, is amplified and overexpressed in many cancer cell types, and is involved in the induction of centrosome duplication-distribution abnormalities and aneuploidy in mammalian cells. So that, Aurora-A is a potential oncogene. Aurora family have been identified three types (Aurora-A, B, C) which has high homology domain in C terminal region. Aurora family is indispensable kinase that regulate the structure and function of centrosomes and spindle. Aurora-A could be one of targeting molecule of anti-cancer therapy. This antibody was established from the purified serum of the immunized rabbit with N terminal region of Aurora-A and did not show any cross-reactivity to Aurora-B and Aurora-C. This antibody is useful for western blotting and immunohistochemistry.



Sample : HeLa Cell

Preparation of antibodies and instruction

Dr.Saya H. and Dr.Marumoto T. at Department of Tumor Genetics and Biology, Kumamoto University School of medicine.

Anti – Siah1

SIAH1; Siah-1; hSIAH1; HUMSIAH; Siah-1a

Cat No.	Size	Conjugation	Price	Application	Note
KR055	25 μ g/100 μ l	–	¥49,000	WB	

Host	: Rabbit	Specificity	: Human
Isotype	: –	Clonality	: Polyclonal Antibody
Immunogen	: Partial peptide of human Siah1 (N terminal)		
Purity	: Antigen Affinity Purified	Cross Reactivity	: Not tested

The turnover of a protein is precisely under control in the cell. Particularly, the system of controlling protein degradation via the ubiquitin-proteasome pathway is involving in many kinds of process in the cell. The Drosophila Seven in absentina (Sina) gene product originally was identified as a protein that controls cell fate decisions during eye development. Its mammalian homolog, Siah1 and Siah2, have been described that they might involve in ubiquitin-mediated proteolysis of several proteins, as well as in growth arrest and p53-induced apoptosis. This antibody is very useful for identifying the function of the mammalian Siah1 in the cell.

Preparation of antibodies and instruction

Dr.Koki Moriyoshi at Department of Biological Sciences, Kyoto University Faculty of Medicine

① ②



Sample: 293 cell lysate
1) control
2) Siah1 gene transgenic cell + MG-132 (protease inhibitor)

Anti – Siah2

SIAH2; hSiah2

Cat No.	Size	Conjugation	Price	Application	Note
KR056	25 μ g/100 μ l	–	¥49,000	WB	

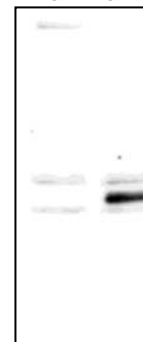
Host	: Rabbit	Specificity	: Human
Isotype	: –	Clonality	: Polyclonal Antibody
Immunogen	: Partial peptide of human Siah2 (N terminal)		
Purity	: Antigen Affinity Purified	Cross Reactivity	: Not tested

The turnover of a protein is precisely under control in the cell. Particularly, the system of controlling protein degradation via the ubiquitin-proteasome pathway is involving in many kinds of process in the cell. The Drosophila Seven in absentina (Sina) gene product originally was identified as a protein that controls cell fate decisions during eye development. Its mammalian homolog, Siah1 and Siah2, have been described that they might involve in ubiquitin-mediated proteolysis of several proteins, as well as in growth arrest and p53-induced apoptosis. Siah2 is expressed in olfactory epithelium, retina, forebrain and proliferating cartilage of developing bone by mRNA level. This antibody is very useful for identifying the function of the mammalian Siah2 in the cell.

Preparation of antibodies and instruction

Dr.Koki Moriyoshi at Department of Biological Sciences, Kyoto University Faculty of Medicine

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Sample: 293 cell lysate
1) control
2) Siah2 gene transgenic cell + MG-132 (protease inhibitor)

Anti – G5PR

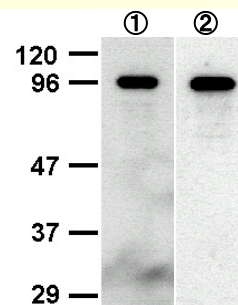
Cat No.	Size	Conjugation	Price	Application	Note
KR058	25 μg/100 μl	—	¥49,000	IP, WB	

Host : Rabbit **Specificity** : Mouse
Isotype : — **Clonality** : Polyclonal Antibody
Immunogen : Partial peptide of mouse G5PR (C terminal)
Purity : Antigen Affinity Purified **Cross Reactivity** : Not tested

G5PR was cloned as novel protein which could bind to Germinal center Associated DNA Primase (GANP). GANP is involved in important events that regulate DNA replication in activated germinal centre B cells. G5PR is homologous to known regulatory B⁷ subunits of PP2A, and the G5PR protein is associated with PP5 and PP2A, suggesting that G5PR is a GANP-associated PPase component. G5PR contributes to the regulation of the phosphorylation state of the chromatin-bound or nonbound form of MCM3 (minichromosome replication molecule 3) in vivo. So that, G5PR might regulate MCM3/GANP complex phosphorylation state during cell cycle progression. This antibody is very useful for immunoprecipitation and westernblotting.

Preparation of antibodies and instruction
 Drs.Sakaguchi N. and Igarashi H. at Department Immunology, Kumamoto University School of Medicine

Ppp2r3c; G4-1; G5pr



Myc-GFP-G5PR co-transfected cell lysate
 ① Immunoprecipitated by anti-G5PR antibody, then detected by anti-Myc antibody
 ② Immunoprecipitated by anti-Myc antibody, then detected by anti-G5PR antibody

Anti – Ajuba

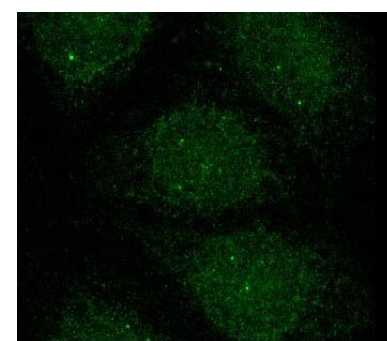
JUB; Ajuba

Cat No.	Size	Conjugation	Price	Application	Note
KR068	25ug / 100ul	—	¥49,000	IC, IP	

Host : Rabbit **Specificity** : Human
Isotype : — **Clonality** : Polyclonal Antibody
Immunogen : GST-Human Ajuba fusion protein (Full length)
Purity : Antigen Affinity Purified **Cross Reactivity** : Not tested

Aurora-A(Aurora-A/STK-15/Aik) encoding a centrosome-associated Ser/Thr kinase, is amplified and overexpressed in many cancer cell types, and is involved in the induction of centrosome duplication-distribution abnormalities and aneuploidy in mammalian cells. In vitro transformation activity of Aurora-A suggested to be a potential oncogene. Recent research elucidated that Ajuba, Aurora-A binding protein, induces the autophosphorylation and consequent activation of Aurora-A. In the future this antibody will contribute the research progress whether Ajuba and Aurora-A are involved in tumorigenesis. This antibody is useful for immunoprecipitation and immunocytochemistry.

Preparation of antibodies and instruction :
 Dr. Saya H. and Dr. Hirota T. at Department of Tumor Genetics and Biology, Kumamoto University School of medicine.



HeLa Cell

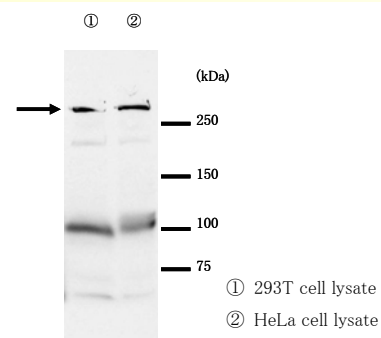
Anti – MDC1

MDC1; NFBBD1; KIAA0170; DKFZp781A0122

Cat No.	Size	Conjugation	Price	Application	Note
KR087	25 μg/100 μl	—	¥49,000	WB	

Host : Rabbit **Specificity** : Human
Isotype : — **Clonality** : Polyclonal Antibody
Immunogen : Partial peptide of human MDC1 (N terminal)
Purity : Antigen Affinity Purified **Cross Reactivity** : Not tested

Preparation of antibodies and instruction :
 Miki Y, Yoshida K
 Department of Molecular Pathogenesis, Division of Pathophysiology, Medical Research Institute, Tokyo Medical and Dental University



① 293T cell lysate
 ② HeLa cell lysate

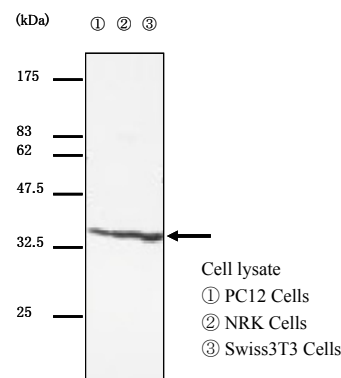
Anti – Phospholipid scramblase2

Plscr2

Cat No.	Size	Conjugation	Price	Application	Note
KR097	100 μg/400 μl	—	¥49,000	WB	

Host : Rabbit **Specificity** : Mouse
Isotype : — **Clonality** : Polyclonal Antibody
Immunogen : Partial peptide of mouse Phospholipid scramblase2 (Central region)
Purity : Antigen Affinity Purified **Cross Reactivity** : Not tested

Preparation of antibodies and instruction :
 Yagisawa H
 Graduate School of Life Science, University of Hyogo



Cell lysate
 ① PC12 Cells
 ② NRK Cells
 ③ Swiss3T3 Cells

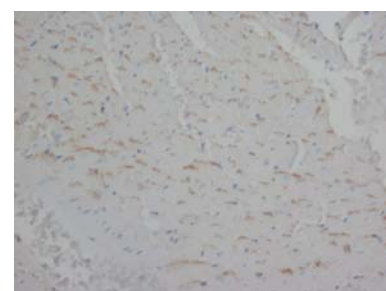
Anti – Annexin V

PP4; ANX5; ENX2; ANXA5; annexin A5

Cat No.	Size	Conjugation	Price	Application	Note
KW150	100 μ g	—	¥51,000	IH, WB	

Host	: Rabbit	Specificity	: Human
Isotype	: —	Clonality	: Polyclonal Antibody
Immunogen	: Partial peptide of human AnnexinV (C terminal)		
Purity	: Antigen Affinity Purified	Cross Reactivity	: Mouse, rat, rabbit

Annexin V also known as endonexin II (ENX2) or placental protein 4 (PP4). Endonexin II is a member of the family of Ca(2+)-dependent phospholipid binding proteins, known as annexins. It binds to the phospholipids that are preferentially located on the cytosolic face of the plasma membrane. It has a relative molecular weight of about 35,000. The gene lies on mouse chromosome 3 in close linkage with the fibroblast growth factor 2 (basic) gene and is syntenic with other genes known to have orthologous counterparts on human chromosome 4q. The PP4 cDNA encoded a protein of 320 amino acid residues. A single mRNA, approximately 1.6 kb long, was found to be expressed in human cell lines and placenta. PP4 is an anticoagulant protein that acts as an indirect inhibitor of the thromboplastin-specific complex, which is involved in the blood coagulation cascade.



Rat cardiac muscle tissue

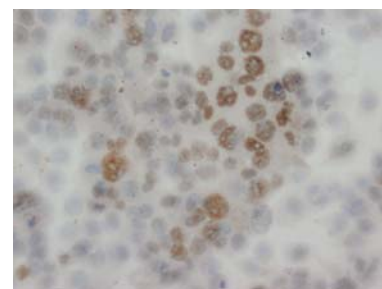
Anti – API5

AAC11; AAC-11; API5; apoptosis inhibitor 5

Cat No.	Size	Conjugation	Price	Application	Note
KW151	100 μ g	—	¥51,000	IH, WB	

Host	: Rabbit	Specificity	: Human
Isotype	: —	Clonality	: Polyclonal Antibody
Immunogen	: Partial peptide of human API5 (C terminal)		
Purity	: Antigen Affinity Purified	Cross Reactivity	: Mouse, rat, rabbit

Many growth factors and cytokines act as cellular survival factors by preventing programmed cell death (apoptosis). Apoptosis inhibitor 5 (API5) is an antiapoptotic factor which may have a role in protein assembly. It is a critical determinant of E2F1-induced apoptosis, acting downstream of E2F to suppress E2F-dependent apoptosis without generally blocking E2F-dependent transcription.



Human epidermic carcinoma

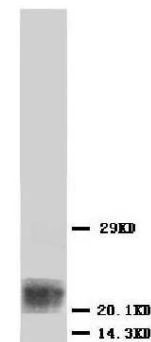
Anti – BAX

BCL2L4; BAX; BCL2-associated X protein

Cat No.	Size	Conjugation	Price	Application	Note
KW155	100 μ g	—	¥51,000	IH, WB	

Host	: Rabbit	Specificity	: Human
Isotype	: —	Clonality	: Polyclonal Antibody
Immunogen	: Partial peptide of human BAX (Near the N terminal)		
Purity	: Antigen Affinity Purified	Cross Reactivity	: Mouse, rat

BAX (Bcl-2 Associated X Protein) is a member of the Bcl-2 gene family, it encodes a 21-kDa protein whose association with Bcl-2 is believed to play a critical role in regulating apoptosis. Human BAX gene is located in the q13.3-q13.4 region of human chromosome 19. Bax is an apoptosis-inducing protein that participates in cell death during normal development and in various diseases. It resides in an inactive state in the cytosol of many cells. Bax consists of 9 alpha helices and has extensive amino acid homology with Bcl-2, focused within highly conserved domains I and II. Bax is encoded by six exons and demonstrates a complex pattern of alternative RNA splicing that predicts a 21 kd membrane (alpha) and two forms of cytosolic protein (beta and gamma). BAX and BAK are essential for regulating the number of B cells at both immature and mature developmental stages. They are critical mediators of B cell death induced by multiple stimuli.



HeLa cell lysis

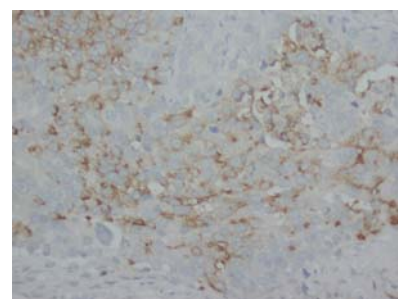
Anti – CXCR2

CD182; CXCR2; IL8R2; IL8RA; CMKAR2; CDw128b; IL8RB; interleukin 8 receptor, beta

Cat No.	Size	Conjugation	Price	Application	Note
KW170	100 μ g	—	¥51,000	IH, WB	

Host	: Rabbit	Specificity	: Human
Isotype	: —	Clonality	: Polyclonal Antibody
Immunogen	: Partial peptide of human CXCR2 (Middle region)		
Purity	: Antigen Affinity Purified	Cross Reactivity	: —

CXCR2 is a receptor for Interleukin 8, which is a powerful neutrophil chemotactic factor. It is a member of the GPCR family (subfamily, chemokine). Binding of IL8 to the receptor causes activation of neutrophils. This response is mediated via a G-protein that activates a phosphatidylinositol-calcium second messenger system. This receptor binds to IL8 with a high affinity and to GRO/MGSA and NAP2 also with a high affinity. It has been reported to be expressed in a wide variety of tissues. ESTs have been isolated from human placenta and thymus libraries.



Human lung cancer

Anti – NIP3

NIP3; BNIP3; BCL2/adenovirus E1B 19kDa interacting protein 3

Cat No.	Size	Conjugation	Price	Application	Note
KW198	100 μ g	—	¥51,000	IC, IH, WB	

Host	: Rabbit	Specificity	: Human
Isotype	: —	Clonality	: Polyclonal Antibody
Immunogen	: Partial peptide of human NIP3 (Near the C terminal)		
Purity	: Antigen Affinity Purified	Cross Reactivity	: Mouse, rat, rabbit

The Bcl-2 nineteen kilodalton interacting protein 3 (BNIP3 or NIP3), is a hypoxia-inducible proapoptotic member of the Bcl-2 family that induces cell death by associating with the mitochondria. BNIP3, expressed in skeletal muscle and in the brain at low levels, is primarily localized to the nucleus of glial cells of the normal human brain, as well as in the malignant glioma cell line U251. BNIP3 expression in the cytoplasm increases and localizes with the mitochondria, contributing to induction of cell death. Cellular protein BNIP3 interacts with E1B-19K, BCL-2, BCL-xL, and EBV-BHRF1. BNIP3 contains Bcl-2 homology 3 (BH3) domain and COOH-terminal transmembrane (TM) domain. The BH3 domain of BNIP3 mediates Bcl-2/Bcl-X(L) heterodimerization and confers pro-apoptotic activity; whereas the TM domain is critical for homodimerization, pro-apoptotic function, and mitochondrial targeting.

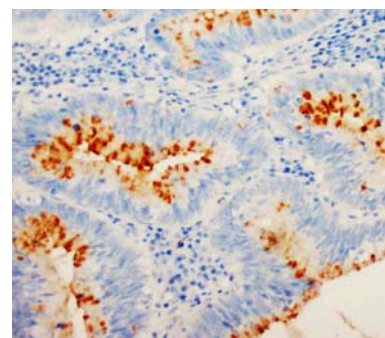
Anti – P27

Rpn4, p27; PSMD9; proteasome (prosome, macropain) 26S subunit

Cat No.	Size	Conjugation	Price	Application	Note
KW204	100 μ g	—	¥51,000	IH, WB	

Host	: Rabbit	Specificity	: Human
Isotype	: —	Clonality	: Polyclonal Antibody
Immunogen	: Partial peptide of human P27 (C terminal end)		
Purity	: Antigen Affinity Purified	Cross Reactivity	: Mouse, rat

Cyclin-dependent kinase inhibitor 1B (CDKN1B), also known as p27 (KIP1), is a cyclin-dependent kinase (Cdk) inhibitor implicated in G1 phase arrest, which negatively regulates G1 phase progression in response to TGF beta and represents a tumor suppressor gene. Human p27 gene is mapped to chromosome 12p12.3 p27 can be both an inhibitor and a substrate of cyclin E-CDK2. p27, abundant in quiescent cells and drops after serum stimulation, plays a role in mediating VSMC hypertrophy. p27 degradation is subject to dual control by the accumulation of both SKP2 and cyclins following mitogenic stimulation. It regulates cell proliferation by binding to and modulating the activity of cyclin-dependent kinases. Reduced p27 activity is fundamental for the development of many human malignancies including breast, prostate, colon and gastric carcinomas.



Human intestinal cancer
Staining P27 in nucleus
DAB chromogenic reaction

Anti – P27

p27; Kip1; p27Kip1; Cdkn1b; cyclin-dependent kinase inhibitor 1B; CDKN1B

Cat No.	Size	Conjugation	Price	Application	Note
KW327	100 μ g	—	¥51,000	IC, WB	

Host	: Mouse	Specificity	: —
Isotype	: IgG1	Clonality	: Monoclonal Antibody (IMD-27)
Immunogen	: Recombinant rodent p27(kip1) protein		
Purity	: Goat anti-mIgG affinity chromatography	Cross Reactivity	: Human, mouse, rat

P27(kip1), also known as cyclin dependent kinase inhibitor 1B(CDKN1B), is a major target of AFX-like forkhead proteins. CDKN1B (p27) belongs to the Cip/Kip family and functions as an important cell cycle gatekeeper. Phosphorylation leads to the ubiquitination and degradation of CDKN1B. P27(kip1) mapped to 12p13. An increase in p27 causes proliferating cells to exit from the cell cycle, and a decrease in p27 is necessary for quiescent cells to resume division. Abnormally low amounts of p27 are associated with pathological states of excessive cell proliferation, especially cancers. Overexpression of p27Kip1 lengthens the G1 phase in a mouse model that targets inducible gene expression to central nervous system progenitor cells.

Anti – Fas-L

Fas-L; FASL; CD178; CD95L; TNFSF6; APT1LG1; FASLG; Fas ligand (TNF superfamily, member 6)

Cat No.	Size	Conjugation	Price	Application	Note
KW223	100 μ g	—	¥51,000	IC, IH, WB	

Host	: Rabbit	Specificity	: Human
Isotype	: —	Clonality	: Polyclonal Antibody
Immunogen	: Partial peptide of human FAS-L (C terminal)		
Purity	: Antigen Affinity Purified	Cross Reactivity	: Mouse, rat

FAS Ligand (FASL) is a 40 kDa type II membrane protein belonging to the tumor necrosis factor family, which induces apoptosis by binding to its receptor, Fas. The human FasL gene consists of approximately 8.0 kb and is split into four exons. This gene consists of 281 amino acids with a calculated M(r) of 31,759 and was mapped on chromosome 1q23. It has an identity of 76.9% at the amino acid sequence level with mouse FasL. The FAS and FASL system plays a key role in regulating apoptotic cell death and corruption of this signalling pathway has been shown to participate in immune escape and tumorigenesis. FAS and FASL triggered apoptosis pathway plays an important role in human carcinogenesis. This system may also play a role in modulating the genetic susceptibility of mouse strains to develop T-cell lymphoblastic lymphomas.

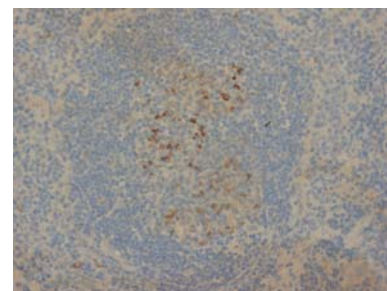
Anti – FAS

Tnfrsf6; Fas; Fas (TNF receptor superfamily, member 6)

Cat No.	Size	Conjugation	Price	Application	Note
KW238	100 μ g	—	¥51,000	IC, IH, WB	

Host	: Rabbit	Specificity	: Rat
Isotype	: —	Clonality	: Polyclonal Antibody
Immunogen	: Partial peptide of rat FAS (N terminal)		
Purity	: Antigen Affinity Purified	Cross Reactivity	: Mouse

FAS (also known as surface antigen APO1 or CD95) is a member of the tumour-necrosis receptor factor family of death receptors, can induce apoptosis or, conversely, can deliver growth stimulatory signals. It acts as an inducer of both neurite growth in vitro and accelerated recovery after nerve injury in vivo. Fas antigen is expressed and functional on papillary thyroid cancer cells and this may have potential therapeutic significance. The FAS antigen shows structural homology with a number of cell surface receptors, including tumor necrosis factor (TNF) receptors and the low-affinity nerve growth factor receptor (NGFR) and is mapped to 10q24.1. And the FAS and FASL system plays a key role in regulating apoptotic cell death and corruption of this signalling pathway has been shown to participate in immune escape and tumorigenesis.



Mouse spleen tissue using FAS antibody.

Anti – BAP1

UCHL2; hucep-6; HUCEP-13; KIAA0272; DKFZp686N04275; BAP1; BRCA1 associated protein-1

Cat No.	Size	Conjugation	Price	Application	Note
KW253	100 μ g	—	¥51,000	IC, WB	

Host	: Mouse	Specificity	: Human
Isotype	: IgG1	Clonality	: Monoclonal Antibody (BP-1)
Immunogen	: Recombinant full-length BAP1		
Purity	: Goat anti-mIgG affinity chromatography		
Cross Reactivity	: —		

BAP1, also known as BRCA1-associated protein-1, contains an acidic region, a highly charged C-terminal region, and 2 putative nuclear localization signals. BAP1 is a novel ubiquitin hydrolase which binds to the BRCA1 RING finger and enhances BRCA1-mediated cell growth suppression. BAP1 is expressed as a 4-kb mRNA in all human tissues, and mapped to 3p21.3.

Anti – Bcl-2

Bcl-2; BCL2; B-cell CLL/lymphoma 2

Cat No.	Size	Conjugation	Price	Application	Note
KW255	100 μ g	—	¥51,000	IC, IH, WB	

Host	: Mouse	Specificity	: Human
Isotype	: IgG1	Clonality	: Monoclonal Antibody (BL-2)
Immunogen	: Partial peptide of Bcl-2 (residues 41-54) conjugated to thyroglobulin		
Purity	: Goat anti-mIgG affinity chromatography		
Cross Reactivity	: —		

Immunoreactive BCL2 protein in the neoplastic cells of almost all follicular lymphomas whereas no BCL2 protein was detected in follicles affected by nonneoplastic processes or in normal lymphoid tissue. Every tumor with molecular-genetic evidence of t(14;18) translocation expressed detectable levels of BCL2 protein, regardless of whether the breakpoint was located in or at a distance from the BCL2 gene. Overexpression of BCL2 blocks the apoptotic death of a pro-B-lymphocyte cell line.

Anti – Cdc25c

CDC25; CDC25C; cell division cycle 25 homolog C

Cat No.	Size	Conjugation	Price	Application	Note
KW269	100 μ g	—	¥51,000	WB	

Host	: Mouse	Specificity	: Human
Isotype	: IgG1	Clonality	: Monoclonal Antibody (IMD-25)
Immunogen	: Recombinant human Cdc25c		
Purity	: Goat anti-mIgG affinity chromatography		
Cross Reactivity	: —		

Cell division cycle(CDC25) gene product is a protein-tyrosine phosphatase, activates a partially purified p34(cdc2)/cyclin B complex. The cdc25 protein also shares homology with a protein phosphatase with activity against both tyrosine and serine (and thus probably threonine) phosphate residues. CDC25C is expressed predominantly in G2 phase in healer cells. The human gene encodes a protein with a predicted molecular mass of 53,000 daltons whose C-terminal domain shares about 37% sequence identity with the fission yeast cdc25 mitotic inducer. CDC25C gene is mapped to 5q31.

Anti – Cdc6

CDC18L; HsCDC6; HsCDC18; CDC6; cell division cycle 6 homolog

Cat No.	Size	Conjugation	Price	Application	Note
KW270	100 μ g	—	¥51,000	WB	

Host : Mouse **Specificity** : Human
Isotype : IgG1 **Clonality** : Monoclonal Antibody (IMD-6)
Immunogen : Recombinant human Cdc6
Purity : Goat anti-mIgG affinity chromatography **Cross Reactivity** : —

Cell division cycle(CDC25) gene product is a protein-tyrosine phosphatase, activates a partially purified p34(cdc2)/cyclin B complex. The cdc25 protein also shares homology with a protein phosphatase with activity against both tyrosine and serine (and thus probably threonine) phosphate residues. CDC25C is expressed predominantly in G2 phase in healer cells. The human gene encodes a protein with a predicted molecular mass of 53,000 daltons whose C-terminal domain shares about 37% sequence identity with the fission yeast cdc25 mitotic inducer. CDC25C gene is mapped to 5q31.

Anti – Cdk4

CMM3; PSK-J3; MGC14458; CDK4; cyclin-dependent kinase 4

Cat No.	Size	Conjugation	Price	Application	Note
KW271	100 μ g	—	¥51,000	IC, WB	

Host : Mouse **Specificity** : Human
Isotype : IgG2a **Clonality** : Monoclonal Antibody (IML-4)
Immunogen : Recombinant human Cdk4 protein
Purity : Goat anti-mIgG affinity chromatography **Cross Reactivity** : Mouse, rat

Cyclin-dependent kinase-4 (CDK4) is a protein-serine kinase involved in the cell cycle. Human cell division is regulated primarily at the G1-to-S or the G2-to-M boundaries within the cell cycle. The complexes formed by CDK4 and the D-type cyclins are involved in the control of cell proliferation during the G1 phase. CDK4 is inhibited by p16, also known as cyclin-dependent kinase inhibitor-2. CDK4 is mapped to 12q14. CDK4 expression and activity are required for cytokine responsiveness in T cells.

Anti – Cdk6

PLSTIRE; MGC59692; CDK6; cyclin-dependent kinase 6

Cat No.	Size	Conjugation	Price	Application	Note
KW272	100 μ g	—	¥51,000	IC, WB	

Host : Mouse **Specificity** : Human
Isotype : IgG1 **Clonality** : Monoclonal Antibody (IML-6)
Immunogen : Recombinant human Cdk6 protein
Purity : Goat anti-mIgG affinity chromatography **Cross Reactivity** : Mouse, rat

The cyclin-dependent protein kinases (CDKs) regulate major cell cycle transitions in eukaryotic cells. Cyclin-dependent kinase-6 (CDK6) is the earliest inducible member of the CDK family in human T lymphocytes, involved in growth factor stimulation and cell cycle progression. germline mutations in CDK6 do not make a significant contribution to melanoma predisposition. CDK6 gene is mapped at 7q21-q22.

Anti – Cdk7

CAK1; MO15; STK1; CDKN7; p39MO15; CDK7; cyclin-dependent kinase 7

Cat No.	Size	Conjugation	Price	Application	Note
KW273	100 μ g	—	¥51,000	IC, IH, WB	

Host : Mouse **Specificity** : Human
Isotype : IgG2b **Clonality** : Monoclonal Antibody (IMD-26)
Immunogen : Recombinant human Cdk7 protein
Purity : Goat anti-mIgG affinity chromatography **Cross Reactivity** : —

CDK-activating kinases (CAKs) are multisubunit proteins that phosphorylate and thus activate certain cyclin-dependent protein kinases in the regulation of cell cycle progression. Cyclin dependent kinase7(CDK7) gene is mapped to chromosome 2p15-cen. CDK7 functions in both cyclin binding and T-loop phosphorylation and that these 2 steps of CDK1 activation are mutually dependent.

Anti – Cyclin A

CCNA1; cyclin A1;CCNA2; CCNA; cyclin A2

Cat No.	Size	Conjugation	Price	Application	Note
KW283	100 μ g	—	¥51,000	IC, WB	

Host : Mouse **Specificity** : —
Isotype : IgG2a **Clonality** : Monoclonal Antibody (CY-28)
Immunogen : Recombinant bovine cyclin A
Purity : Goat anti-mIgG affinity chromatography **Cross Reactivity** : Human, mouse

The mammalian A-type cyclin family consists of 2 members, cyclin A1 (CCNA1) and cyclin A2 (CCNA2). Human cyclin A gene is assigned to 4q26-q27. Cyclin A protein is synthesized and localized into the nucleus at the onset of S phase in nontransformed mammalian fibroblasts.

Anti – Cyclin D1

BCL1; PRAD1; U21B31; D11S287E; CCND1; cyclin D1

Cat No.	Size	Conjugation	Price	Application	Note
KW284	100 μ g	—	¥51,000	IC, IH, WB	

Host	: Mouse	Specificity	: Human
Isotype	: IgG2a	Clonality	: Monoclonal Antibody (CY-D1)
Immunogen	: Recombinant human cyclin D1 protein		
Purity	: Goat anti-mIgG affinity chromatography Cross Reactivity : Mouse, rat		

D-type cyclins (cyclins D1, D2, and D3) are regarded as essential links between cell environment and the core cell cycle machinery. CyclinD1(CCND1) also known as BCL1. Expression of cyclin D1, but not of cyclins A and E, was induced by transfection of the RB gene into RB-deficient tumor cells. CCND1 gene to 11q13. cyclin D1 gene can function as an oncogene. Cyclin D1 expression is regulated by the retinoblastoma protein.

Anti – Cyclin D2

KIAK0002; MGC102758; CCND2; cyclin D2

Cat No.	Size	Conjugation	Price	Application	Note
KW285	100 μ g	—	¥51,000	IC, WB	

Host	: Mouse	Specificity	: Human
Isotype	: IgG2a	Clonality	: Monoclonal Antibody (CY-D2)
Immunogen	: Recombinant human cyclin D2 protein		
Purity	: Goat anti-mIgG affinity chromatography Cross Reactivity : Mouse		

Inaba et al. (1992) used murine cDNA clones for 3 cyclin D genes that are normally expressed during the G1 phase of the cell cycle to clone the cognate human genes. D-type cyclins (cyclins D1, D2, and D3) are regarded as essential links between cell environment and the core cell cycle machinery. cyclin D2(CCND2) gene is assigned to 12p13.

Anti – Cyclin D3

CCND3; cyclin D3

Cat No.	Size	Conjugation	Price	Application	Note
KW286	100 μ g	—	¥51,000	IC, IH, WB	

Host	: Mouse	Specificity	: Human
Isotype	: IgG1	Clonality	: Monoclonal Antibody (CY-D3)
Immunogen	: Recombinant human cyclin D3 protein		
Purity	: Goat anti-mIgG affinity chromatography Cross Reactivity : Mouse, rat		

Three cyclin D genes are normally expressed during the G1 phase of the cell cycle. The three human D-type cyclin genes encode small (33-34 kD) proteins that share an average of 57% identity over the entire coding region and 78% in the cyclin box. Mouse cyclin D3 gene contains 5 exons spanning about 7 kb of genomic DNA. CCND3 gene is mapped to 6p21.

Anti – MAP1

Mtap1a; Map1a; microtubule-associated protein 1A; Mtap1b; Map1b; microtubule-associated protein 1B

Cat No.	Size	Conjugation	Price	Application	Note
KW307	100 μ g	—	¥51,000	IH, WB	

Host	: Mouse	Specificity	: Rat
Isotype	: IgG1	Clonality	: Monoclonal Antibody (MP-1)
Immunogen	: Rat brain microtubule-associated proteins (MAPs)		
Purity	: Goat anti-mIgG affinity chromatography Cross Reactivity : —		

Microtubules are the ubiquitous cytoskeletal structural components that are involved in intracellular transport. They are composed of tubulin and microtubule-associated proteins (MAPs). MAP1 is one of the major neuronal MAPs as well as being the largest (350KD). MAPs include MAP1A, MAP1B, and MAP2. MAP1a is a single-copy gene spanning 10.5 kb. MAP1a coding sequence is contained in five exons. MAP1B is encoded as a polyprotein that is processed to form a complex N-terminal microtubule-binding domain.

Anti – MDM2

HDMX; hdm2; MGC5370; MGC71221; MDM2; Mdm2 p53 binding protein homolog

Cat No.	Size	Conjugation	Price	Application	Note
KW310	100 μ g	—	¥55,000	IC, IH, WB	

Host	: Mouse	Specificity	: Human
Isotype	: IgG1	Clonality	: Monoclonal Antibody (JAN-2)
Immunogen	: Partial peptide of human MDM2 (154-167 a.a.)		
Purity	: Goat anti-mIgG affinity chromatography Cross Reactivity : Mouse, rat		

The MDM2 gene was originally identified by virtue of its amplification in a spontaneously transformed derivative of mouse BALB/c cells, and the MDM2 protein was subsequently shown to bind to p53 in rat cells transfected with p53 genes. Mdm2 acts as a major regulator of the tumor suppressor p53 by targeting its destruction. MDM2 gene is mapped to 12q14.3-q15. The mdm2 gene encodes a zinc finger protein that negatively regulates p53 function by binding and masking the p53 transcriptional activation domain. Overexpression of the MDM-2 gene in cells increases their tumorigenic potential and overcomes the growth-suppressive activity of p53.

Anti – Myoglobin

PVALB; MGC13548; MB; myoglobin

Cat No.	Size	Conjugation	Price	Application	Note
KW313	100 μ g	—	¥51,000	IH, WB	

Host : Mouse **Specificity** : —
Isotype : IgG **Clonality** : Monoclonal Antibody (JAN-12)
Immunogen : —
Purity : Goat anti-mIgG affinity chromatography **Cross Reactivity** : Human, rat

Human myoglobin has 152 residues. Two myoglobin variants were found. The myoglobin locus mapped to 22q11-22q13. The myoglobin gene is about 10.5 kb long and contains two introns as in the case with hemoglobin genes. Myoglobin may serve a variety of functions in muscular oxygen supply, such as O(2) storage, facilitated O(2) diffusion, and myoglobin-mediated oxidative phosphorylation.

Anti – P34 (cdc2)

CDK1; CDC28A; DKFZp686L20222; CDC2; cell division cycle 2, G1 to S and G2 to M

Cat No.	Size	Conjugation	Price	Application	Note
KW328	100 μ g	—	¥51,000	IH, WB	

Host : Mouse **Specificity** : Human
Isotype : IgG2a **Clonality** : Monoclonal Antibody (IMD-34)
Immunogen : C-terminal two-thirds of Xenopus p34 (cdc2) expressed in *E. coli*.
Purity : Goat anti-mIgG affinity chromatography **Cross Reactivity** : Mouse, rat, rabbit, chicken

P34(cdc2) also known as cell division cycle(CDC2), or cyclin-dependent kinase 1(CDK1). CDC2 is a catalytic subunit of a protein kinase complex, called the M-phase promoting factor, that induces entry into mitosis and is universal among eukaryotes. In HeLa cells CDC2 is the most abundant phosphotyrosine-containing protein and its phosphotyrosine content is subject to cell cycle regulation. CDC2 gene is located on chromosome 10.

Anti – PCNA

MGC8367; PCNA; proliferating cell nuclear antigen

Cat No.	Size	Conjugation	Price	Application	Note
KW334	100 μ g	—	¥51,000	IC, IH, WB	

Host : Mouse **Specificity** : —
Isotype : IgG2a **Clonality** : Monoclonal Antibody (IML-83)
Immunogen : Protein A fusion protein
Purity : Goat anti-mIgG affinity chromatography **Cross Reactivity** : Human, mouse, rat

Proliferating cell nuclear antigen (PCNA) was originally identified by immunofluorescence as a nuclear protein whose appearance correlated with the proliferative state of the cell. PCNA/cyclin has been localized by in situ hybridization to the short arm of human chromosome 20 with a peak of grains over band 20p13. PCNA gene is present in single copy and has 6 exons. It spans 4,961 bp. Synthesis of the nuclear protein cyclin and DNA in quiescent mouse fibroblasts is coordinately induced by serum and purified growth factors. PCNA controls establishment of sister chromatid cohesion during S phase.

Anti – PSTAIR

PSTAIRE; cyclin-dependent protein kinase; CDK

Cat No.	Size	Conjugation	Price	Application	Note
KW338	100 μ g	—	¥51,000	WB	

Host : Mouse **Specificity** : —
Isotype : IgG1 **Clonality** : Monoclonal Antibody (IL-16)
Immunogen : —
Purity : Goat anti-mIgG affinity chromatography **Cross Reactivity** : Human, mouse, rabbit, rat

The cyclin-dependent protein kinases (CDKs) regulate major cell cycle transitions in eukaryotic cells. CDKs contain an evolutionary conserved 16 amino acid sequence called PSTAIR (EGVPSTAIRESLLKE) which distinguishes them from other protein kinases. The PSTAIRE motif found in prototypic CDC2 kinases. CDC2L1 is referred as PITSLRE B, based on the amino acid sequence of the region corresponding to the conserved CDC2 PSTAIRE box.

Anti – CHK2

CHK2 checkpoint homolog, CDS1; LFS2; RAD53; HuCds1; PP1425; CHEK2

Cat No.	Size	Conjugation	Price	Application	Note
KW415	100 μ g	—	¥51,000	WB	

Host	: Rabbit	Specificity	: Human
Isotype	: —	Clonality	: Polyclonal Antibody
Immunogen	: Partial peptide of human CHK2 (C terminal)		
Purity	: Antigen Affinity Purified	Cross Reactivity	: Mouse, rat

CHK2, a protein kinase that is activated in response to DNA damage, is involved in cell cycle arrest. Mapped on 22q12.1, CHK2 has a potential regulatory region rich in SQ and TQ amino acid pairs. It regulates BRCA1 function after DNA damage by phosphorylating serine-988 of BRCA1. Additionally, CHK2 can be modified by phosphorylation and activated in response to ionizing radiation, and can be also modified in response to hydroxyurea treatment. Furthermore, oligomerization of CHEK2 increases the efficiency of transautophosphorylation, resulting in the release of active CHEK2 monomers that proceed to enforce checkpoint control in irradiated cells. Moreover, CHK2 is a tumor suppressor gene conferring predisposition to sarcoma, breast cancer, and brain tumors, and that their observations provided a link between the central role of p53 inactivation in human cancer and the well-defined G2 checkpoint in yeast. There is a wide expression of small amounts of CHK2 mRNA with larger amounts in human testis, spleen, colon, and peripheral blood leukocytes.

Anti – XAF1

XIAP associated factor-1, BIRC4BP; XIAPAF1; HSXIAPAF1

Cat No.	Size	Conjugation	Price	Application	Note
KW431	100 μ g	—	¥51,000	IH, WB	

Host	: Rabbit	Specificity	: Human
Isotype	: —	Clonality	: Polyclonal Antibody
Immunogen	: Partial peptide of human XAF1 (C terminal)		
Purity	: Antigen Affinity Purified	Cross Reactivity	: Mouse, rat

XIAP associated factor-1, also known as XAF1, is a human gene. X-linked inhibitor of apoptosis (XIAP; MIM 300079) is a potent member of the IAP family. All members of this family possess baculoviral IAP (BIR) repeats, cysteine-rich domains of approximately 80 amino acids that bind and inhibit caspases. XAF1 antagonizes the anticaspase activity of XIAP and may be important in mediating apoptosis resistance in cancer cells. And alteration in XAF1 and XIAP RNA expression levels may lead to increased apoptotic resistance and proliferation due to unregulated XIAP function in cancer cells.

Anti – Cyclin D2

KIAK0002; MGC102758; CCND2

Cat No.	Size	Conjugation	Price	Application	Note
KW438	100 μ g	—	¥51,000	WB	

Host	: Rabbit	Specificity	: Human
Isotype	: —	Clonality	: Polyclonal Antibody
Immunogen	: Partial peptide of human Cyclin D2 (C terminal)		
Purity	: Antigen Affinity Purified	Cross Reactivity	: Mouse, rat

Cyclin D2, also known as CCND2, is a human gene. The protein encoded by this gene belongs to the highly conserved cyclin family, whose members are characterized by a dramatic periodicity in protein abundance through the cell cycle. Cyclins function as regulators of CDK kinases. Different cyclins exhibit distinct expression and degradation patterns which contribute to the temporal coordination of each mitotic event. Cyclin D1, Cyclin D2 and Cyclin D3 are the members of the cyclin family. Cyclin D2 mapped to 12p13, since the CCND1 gene is on 11q13, this may be another bit of evidence of the homology of chromosomes 11 and 12. Choi D et al proved the expression of pseudogene cyclin D2 mRNA in the human ovary increases with age, which may be a novel marker for decreased ovarian function associated with the aging process. And knockout studies of the homologous gene in mouse suggest the essential roles of this gene in ovarian granulosa and germ cell proliferation. High level expression of this gene was observed in ovarian and testicular tumors.

Anti - PDCD8

AIF; PDCD8; MGC111425; AIFM1

Cat No.	Size	Conjugation	Price	Application	Note
KB543	50 μ g	-	¥32,000	WB,IF	-

Host:	Mouse	Specificity:	Human
Isotype:	-	Clonality:	Polyclonal Antibody
Immunogen:	Full length of human PDCD8		
Purity:	Protein A purified	Cross Reactivity:	-

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