

## Anti – MOK Protein Kinase

RPS19; DBA

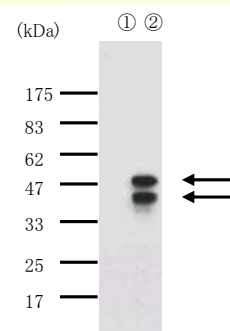
Cat No.	Size	Conjugation	Price	Application	Note
KR085	25 $\mu$ g/100 $\mu$ l	—	¥49,000	IH, WB	

<b>Host</b>	: Rabbit	<b>Specificity</b>	: Mouse
<b>Isotype</b>	: —	<b>Clonality</b>	: Polyclonal Antibody
<b>Immunogen</b>	: GST-MOK Protein Kinase fusion protein		
<b>Purity</b>	: Antigen Affinity Purified	<b>Cross Reactivity</b>	: Not tested

Preparation of antibodies and instruction :

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Sample : COS7 cell extract

① control

② MOK protein kinase transfected

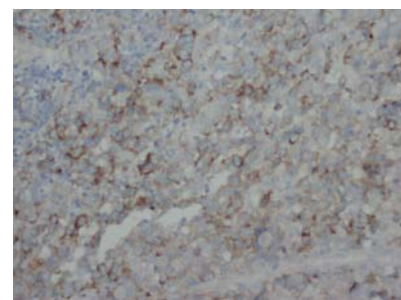
## Anti – FGF4

HBGF-4, HST, HST-1, HSTF1, K-FGF, KFGF; FGF4; fibroblast growth factor 4

Cat No.	Size	Conjugation	Price	Application	Note
KW174	100 $\mu$ g	—	¥51,000	IH, WB	

<b>Host</b>	: Rabbit	<b>Specificity</b>	: Human
<b>Isotype</b>	: —	<b>Clonality</b>	: Polyclonal Antibody
<b>Immunogen</b>	: Partial peptide of human FGF4 (C terminal)		
<b>Purity</b>	: Antigen Affinity Purified	<b>Cross Reactivity</b>	: Mouse, rat, rabbit

Fibroblast growth factor 4 (FGF4) also known as Heparin Secretary Transforming (HSTF1). HST1, for which the designation HSTF1 was proposed for human gene nomenclature, is a heparin-binding growth factor with significant homology to human fibroblast growth factors and the mouse Int-2 protein. By in situ hybridization, Adelaide et al. (1988) mapped the HST gene to chromosome 11q13. The HST1 protein is a heparin-binding growth factor with significant homology with human fibroblast growth factors and the mouse Int-2 protein.



Human lung cancer

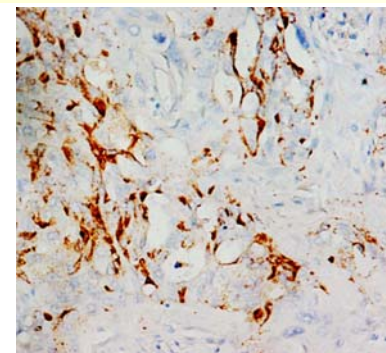
Anti – HIF-1  $\alpha$ 

HIF-1alpha, HIF1, HIF1-ALPHA, MOP1, PASD8, bHLHe78; HIF1A; hypoxia inducible factor 1

Cat No.	Size	Conjugation	Price	Application	Note
KW182	100 $\mu$ g	—	¥51,000	IH, WB	

<b>Host</b>	: Rabbit	<b>Specificity</b>	: Human
<b>Isotype</b>	: —	<b>Clonality</b>	: Polyclonal Antibody
<b>Immunogen</b>	: Partial peptide of human HIF-1 $\alpha$ (C terminal)		
<b>Purity</b>	: Antigen Affinity Purified	<b>Cross Reactivity</b>	: Mouse, rat, rabbit

HIF-1  $\alpha$  (Hypoxia-inducible factor 1  $\alpha$ , HIF1A) is a transcription factor that mediates cellular and systemic homeostatic responses to reduced O<sub>2</sub> availability in mammals, including angiogenesis, erythropoiesis and glycolysis. This gene was mapped to 14q21-q24. HIF-1  $\alpha$  transactivate genes required for energy metabolism and tissue perfusion and is necessary for embryonic development and tumor explant growth. HIF-1alpha is over expressed during carcinogenesis, myocardial infarction and wound healing. It is crucial for the cellular response to hypoxia and is frequently over expressed in human cancers, resulting in the activation of genes essential for cell survival. HIF-1  $\alpha$  regulates the survival and function in the inflammatory microenvironment directly. It is a transcription factor that plays a pivotal role in cellular adaptation to changes in oxygen availability.

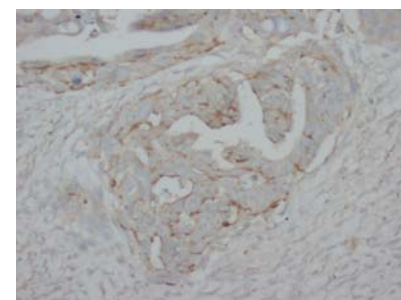
Human mammary cancer  
Staining HIF-1  $\alpha$  in cytoplasm,  
DAB chromogenic reactionAnti – P73  $\alpha$ 

P73; TP73; tumor protein p73

Cat No.	Size	Conjugation	Price	Application	Note
KW205	100 $\mu$ g	—	¥51,000	IH, WB	

<b>Host</b>	: Rabbit	<b>Specificity</b>	: Human
<b>Isotype</b>	: —	<b>Clonality</b>	: Polyclonal Antibody
<b>Immunogen</b>	: Partial peptide of human P73 alpha (C terminal)		
<b>Purity</b>	: Antigen Affinity Purified	<b>Cross Reactivity</b>	: Mouse, rat

p73 is a substrate of the c-Abl kinase and that the ability of c-Abl to phosphorylate p73 is markedly increased by gamma-irradiation. Moreover, p73 was phosphorylated in vivo in response to ionizing radiation. p73, a member of the p53 family of tumour-suppressor proteins, can also induce apoptosis. p73 gene is mapped to chromosome 1p36. p73 is regulated by tyrosine kinase c-Abl in the apoptotic response to DNA damage.



Human intestine cancer sections

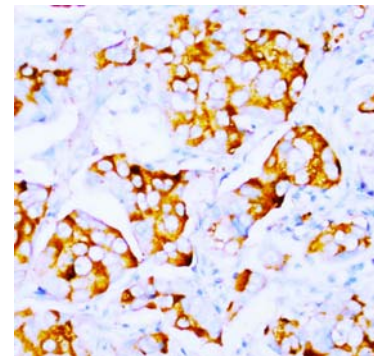
**Anti – TNF  $\alpha$** 

DADB-70P7.1, DIF, TNF-alpha, TNFA, TNFSF2; TNF; tumor necrosis factor

Cat No.	Size	Conjugation	Price	Application	Note
KW220	100 $\mu$ g	—	¥51,000	IH, WB	

**Host** : Rabbit **Specificity** : Human  
**Isotype** : — **Clonality** : Polyclonal Antibody  
**Immunogen** : Partial peptide of human TNF  $\alpha$  (N terminal)  
**Purity** : Antigen Affinity Purified **Cross Reactivity** : Mouse, rat, rabbit

Tumor necrosis factor-alpha (TNFA) also known as TNFR1, it is a potent cytokine, elicits a broad spectrum of biologic responses which are mediated by binding to a cell surface receptor. There are 2 different proteins that serve as major receptors for TNF-alpha, one associated with myeloid cells and one associated with epithelial cells. TNFR1 maps to 12p13. TNFR1 signaling is also known to activate the transcription factor NF-kappa B and promote survival.



Human mammary cancer  
Staining TNF  $\alpha$  in cytoplasm  
DAB chromogenic reaction

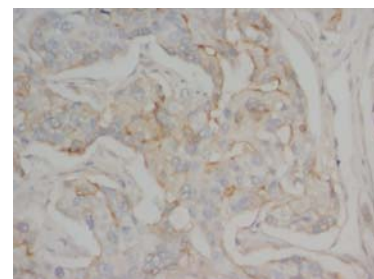
**Anti – IFITM1**

9-27; CD225; IFI17; LEU13; IFITM1; interferon induced transmembrane protein 1 (9-27)

Cat No.	Size	Conjugation	Price	Application	Note
KW231	100 $\mu$ g	—	¥51,000	IH, WB	

**Host** : Rabbit **Specificity** : Human  
**Isotype** : — **Clonality** : Polyclonal Antibody  
**Immunogen** : Partial peptide of human IFITM1 (N terminal)  
**Purity** : Antigen Affinity Purified **Cross Reactivity** :

Interferon-induced Transmembrane Protein 1 (IFITM1), also called Interferon-induced Protein 17 (IFI17). IFITM1 activity is required for primordial germ cells (PGCs) transit from the mesoderm into the endoderm, and that it appears to act via a repulsive mechanism, such that PGCs avoid Ifitm1-expressing tissues. It is mapped to Chr.11 and belongs to the family of interferon-induced transmembrane proteins (Ifitm/mil/fragilis), which encodes cell surface proteins that may modulate cell adhesion and influence cell differentiation. Interferon-inducible membrane proteins of approximately 17 kDa have been suggested to play a role in the antiproliferative activity of interferons based on their pattern of induction in interferon-sensitive and -resistant cell lines and the ability of a membrane fraction enriched in 17-kDa proteins to inhibit cell growth.



Human mammary cancer

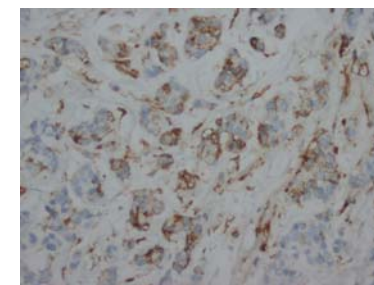
**Anti – HSP27**

MKBP; HSP27; Hs.78846; LOH11CR1K; MGC133245; HSPB2; heat shock 27kDa protein 2

Cat No.	Size	Conjugation	Price	Application	Note
KW240	100 $\mu$ g	—	¥51,000	IH, WB	

**Host** : Rabbit **Specificity** : Human  
**Isotype** : — **Clonality** : Polyclonal Antibody  
**Immunogen** : Partial peptide of human HSP27 (C terminal)  
**Purity** : Antigen Affinity Purified **Cross Reactivity** : Rat

The heat-shock proteins (HSPs) belong to a larger group of polypeptides, the stress proteins, that are induced in various combinations in response to environmental challenges and developmental transitions. Synthesis of the small (27-kD) HSP has been shown to be correlated with the acquisition of thermotolerance. The deduced 199-amino acid HSP27 protein shows sequence similarity to mammalian alpha-crystallins. Approximately 20% of its residues are susceptible to phosphorylation. The HSP27 gene, which is mapped to 7q11.23 and has 3 exons, produced a 2.2-kb transcript in an in vitro transcription assay. Decreasing ROS in cells expressing mutant huntingtin, HSP27 protects cells against oxidative stress. In other words, HSP27 is a suppressor of polyglutamine (polyQ)-mediated cell death. Furthermore, MAPKAPK5 is a major stress-activated kinase that can phosphorylate HSP27 in vitro.



Human breast cancer

**Anti – Estrogen Receptor 2**

Erb; ESRB; ESTRB; NR3A2; ER-BETA; ESR-BETA; ESR2; estrogen receptor 2 (ER beta)

Cat No.	Size	Conjugation	Price	Application	Note
KW245	100 $\mu$ g	—	¥51,000	WB	

**Host** : Rabbit **Specificity** : Human  
**Isotype** : — **Clonality** : Polyclonal Antibody  
**Immunogen** : Partial peptide of human ER  $\beta$  (N terminal)  
**Purity** : Antigen Affinity Purified **Cross Reactivity** : Rat

Estrogen receptor-beta, referred to as ESR2, is a member of the superfamily of nuclear receptors, which can transduce extracellular signals into transcriptional responses. This gene is mapped to 14q and comprises 8 exons spanning approximately 40 kb. ESR2 is expressed in multiple tissues, including developing spermatids of the testis and in ovarian granulosa cells. ESR-beta is homologous to the previously identified ESR-alpha and has an overlapping but nonidentical tissue distribution. The DNA-binding domain of ESR-beta is 96% conserved compared to ESR, and the ligand-binding domain shows 58% conserved residues. ESR-beta is expressed in human thymus, spleen, ovary, and testis. Rat ESR-beta is expressed in rat prostate and ovary and is homologous to rat ESR (95% conserved DNA-binding domain; 55% conserved ligand-binding domain). ESR2 mRNA was coexpressed with ESR1 and its splice variants in 60% of prolactinomas, 100% of mixed growth hormone /prolactin tumors, and 29% of gonadotroph tumors. ESR2 gene expression was not limited to ESR1-positive tumor subtypes, however, and was also found in 100% of null cell tumors, 80% of somatotroph tumors, and 60% of corticotroph tumors.

**Anti – OPCML**

IGLON1, OBCAM, OPCM; OPCML; opioid binding protein/cell adhesion molecule-like

Cat No.	Size	Conjugation	Price	Application	Note
KW250	100 $\mu$ g	—	¥51,000	IH, WB	

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

Opioid-binding protein/cell adhesion molecule-like (OPCML). OPCML is a member of the IgLON family of immunoglobulin (Ig) domain-containing glycosylphosphatidylinositol (GPI)-anchored cell adhesion molecules, as an excellent candidate for the 11q25 ovarian cancer TSG in EOC. The OPCML gene comprises 7 exons, spans approximately 600 kb, and is transcribed from telomere to centromere. And due to the lack of transmembrane domains necessary for signal transduction, it is improbable that OBCAM acts independently as an opioid receptor; more likely, it plays an important accessory role in opioid receptor function.

**Anti – Bcl-10**

Bcl-10; CLAP; mE10; CIPER; c-E10; CARMEN; BCL10; B-cell CLL/lymphoma 10

Cat No.	Size	Conjugation	Price	Application	Note
KW254	100 $\mu$ g	—	¥51,000	IH, WB	

**Host** : Mouse **Specificity** : Human  
**Isotype** : IgG1 **Clonality** : Monoclonal Antibody (BL-10)  
**Immunogen** : Recombinant human Bcl-10  
**Purity** : Goat anti-mIgG affinity chromatography **Cross Reactivity** : —

BCL10 was found to be expressed as a transcript of 4.2 kb in all normal and malignant tissues examined. It contains a CARD domain and is involved in activation of caspase9 to induce apoptosis. It is known to induce activation of JNK, p38 and NF kappaB. Mutations in Bcl10 are observed in many B and T cell lymphomas implicating its role in pathogenesis of human cancer.

**Anti – Bin1**

AMPH2; AMPHL; SH3P9; MGC10367; DKFZp547F068; BIN1; bridging integrator 1

Cat No.	Size	Conjugation	Price	Application	Note
KW256	100 $\mu$ g	—	¥51,000	IC, IH, WB	

**Host** : Mouse **Specificity** : Human  
**Isotype** : IgG2b **Clonality** : Monoclonal Antibody (BN-1)  
**Immunogen** : Recombinant polypeptide containing amino acids 189-398 of human Bin1  
**Purity** : Goat anti-mIgG affinity chromatography **Cross Reactivity** : Mouse, rat, chicken, pig

BIN1 (AMPH2) is a novel human gene product with features of a tumor suppressor protein. BIN1 gene to chromosome 2q14. Loss of BIN1 expression appears to be a frequent aberration in human hepatocellular carcinomas. Mutations in BIN1 cause centronuclear myopathy by interfering with remodeling of T tubules and/or endocytic membranes, and that the functional interaction between BIN1 and DNM2 is necessary for normal muscle function and positioning of nuclei.

**Anti – CEACAM3**

CEA; CD66e; DKFZp781M2392; CEACAM5; carcinoembryonic antigen-related cell adhesion molecule 5

Cat No.	Size	Conjugation	Price	Application	Note
KW274	100 $\mu$ g	—	¥51,000	IH, WB	

**Host** : Mouse **Specificity** : Human  
**Isotype** : IgG1 **Clonality** : Monoclonal Antibody (CEA-9)  
**Immunogen** : Carcinoembryonic antigen(CEA) isolated from a human colon adenocarcinoma cell line  
**Purity** : Goat anti-mIgG affinity chromatography **Cross Reactivity** : —

Carcinoembryonic antigen is a complex immunoreactive glycoprotein with a molecular weight of 180,000 comprising 60% carbohydrate. It is found in adenocarcinomas of endodermally derived digestive system epithelia and in fetal colon. Carcinoembryonic antigen is one of the most widely used tumor markers in serum immunoassay determinations of carcinoma.

**Anti – c-Myc**

c-Myc; bHLHe39; MYC; v-myc myelocytomatosis viral oncogene homolog (avian)

Cat No.	Size	Conjugation	Price	Application	Note
KW279	100 $\mu$ g	—	¥51,000	IC, IH, WB	

**Host** : Mouse **Specificity** : Human  
**Isotype** : IgG2a **Clonality** : Monoclonal Antibody (IMD-3)  
**Immunogen** : Synthetic peptide corresponding to residues 408-439 of the human p62 c-Myc protein  
**Purity** : Goat anti-mIgG affinity chromatography **Cross Reactivity** : —

c-Myc is an oncogene that functions both in the stimulation of cell proliferation and in apoptosis. c-Myc elicits its oncogenic activity by causing immortalization, and to a lesser extent the transformation of cells, in addition to several other mechanisms. The c-MYC proto-oncogene encodes a transcription factor that is critical for cell growth and proliferation. It is one of the genes frequently altered in cancer cells in which it exhibits constitutive activity. Downregulation of c-Myc is critical for 2-Methoxyestradiol (2ME2)-induced oxidative stress and apoptosis in AML cells. And its up-regulation is important for promoting lymphocyte cell division, and demonstrating that GFP-c-Myc expression is a marker of proliferating lymphocytes in vivo.

**Anti – Episialin**

EMA; PEM; PUM; MAM6; PEMT; CD227; H23AG; MUC1; mucin 1, cell surface associated

Cat No.	Size	Conjugation	Price	Application	Note
KW290	100 $\mu$ g	—	¥51,000	IH	

**Host** : Mouse **Specificity** : Human  
**Isotype** : IgG1 **Clonality** : Monoclonal Antibody (EMA-39)  
**Immunogen** : Human milk fat globule membranes  
**Purity** : Goat anti-mIgG affinity chromatography **Cross Reactivity** : —

MUC1 is a large cell surface mucin glycoprotein expressed by most glandular and ductal epithelial cells and some hematopoietic cell lineages. It is expressed on most secretory epithelium, including mammary gland and some hematopoietic cells. It is expressed abundantly in lactating mammary glands and overexpressed abundantly in >90% breast carcinomas and metastases. Transgenic MUC1 has been shown to associate with all four ccebB receptors and localize with erbB1 (EGFR) in lactating glands. The MUC1 gene contains seven exons and produces several different alternatively spliced variants. The major expressed form of MUC1 uses all seven exons and is a type 1 transmembrane protein with a large extracellular tandem repeat domain. The tandem repeat domain is highly O glycosylated and alterations in glycosylation have been shown in epithelial cancer cells.

**Anti – Gastric Mucin**

MUC6; mucin 6, oligomeric mucus/gel-forming

Cat No.	Size	Conjugation	Price	Application	Note
KW294	100 $\mu$ g	—	¥51,000	IC, IH, WB	

**Host** : Mouse **Specificity** : —  
**Isotype** : IgG1 **Clonality** : Monoclonal Antibody (GM-8A12)  
**Immunogen** : Mucin from human ovarian cystfluid  
**Purity** : Goat anti-mIgG affinity chromatography **Cross Reactivity** : Human

The mucin genes encode epithelial glycoproteins, some of which are secreted and some membrane bound. Mucin gastric 6 (MUC6) is a large glycoprotein thought to play a major role in protecting the gastrointestinal tract from acid, proteases, pathogenic microorganisms and mechanical trauma. Expression of the gene was highest in the stomach and gallbladder, with weaker expression in the terminal ileum and right colon. Mucin glycoproteins play a key role in the normal function of the epithelium lining the gastrointestinal tract.

**Anti – MDR**

CLCS; MDR1; P-GP; PGY1; ABC20; CD243; GP170; ABCB1; ATP-binding cassette

Cat No.	Size	Conjugation	Price	Application	Note
KW311	100 $\mu$ g	—	¥51,000	IC, IH, WB	

**Host** : Mouse **Specificity** : —  
**Isotype** : IgG1 **Clonality** : Monoclonal Antibody (PG-13)  
**Immunogen** : A mixture of human and hamster drug-resistant whole cells and crude plasma membranes  
**Purity** : Goat anti-mIgG affinity chromatography **Cross Reactivity** : Human

P-Glycoprotein, also known as Multidrug Resistance 1 (MDR1), is one of the ATP-binding cassette transporters family. P-glycoprotein-1 is involved in the transport of 3 of these protease inhibitors in vitro. MDR1 gene is mapped to the 7q21.1 by in situ hybridization. The MDR1 gene product, P-glycoprotein, mediates the transport of the cardiac glycoside, digoxin.

**Anti – Mucin gastric**

EMA; PEM; PUM; MAM6; PEMT; CD227; H23AG; MUC1; mucin 1, cell surface associated

Cat No.	Size	Conjugation	Price	Application	Note
KW312	100 $\mu$ g	—	¥51,000	IC, IH, WB	

**Host** : Mouse **Specificity** : —  
**Isotype** : IgG1 **Clonality** : Monoclonal Antibody (MG-31)  
**Immunogen** : Mucin from human ovarian cystfluid  
**Purity** : Goat anti-mIgG affinity chromatography **Cross Reactivity** : Human

MUC1 is a large cell surface mucin glycoprotein expressed by most glandular and ductal epithelial cells and some hematopoietic cell lineages. It is expressed on most secretory epithelium, including mammary gland and some hematopoietic cells. It is expressed abundantly in lactating mammary glands and overexpressed abundantly in >90% breast carcinomas and metastases. Transgenic MUC1 has been shown to associate with all four ccebB receptors and localize with erbB1 (EGFR) in lactating glands. The MUC1 gene contains seven exons and produces several different alternatively spliced variants. The major expressed form of MUC1 uses all seven exons and is a type 1 transmembrane protein with a large extracellular tandem repeat domain. The tandem repeat domain is highly O glycosylated and alterations in glycosylation have been shown in epithelial cancer cells.

**Anti – N-Cadherin**

CDHN; NCAD; CD325; CDw325; CDH2; cadherin 2, type 1, N-cadherin (neuronal)

Cat No.	Size	Conjugation	Price	Application	Note
KW318	100 $\mu$ g	—	¥51,000	IC, IH, WB	

**Host** : Mouse **Specificity** : —  
**Isotype** : IgG1 **Clonality** : Monoclonal Antibody (NC-17)  
**Immunogen** : —

**Purity** : Goat anti-mIgG affinity chromatography **Cross Reactivity** : Human, mouse, rat, rabbit, chicken

N-cadherin (NCAD) is a member of the cadherin cell-cell adhesion receptor family that includes P-, E-, and R-cadherin and liver cell adhesion molecule (L-CAM). N-Cadherin, also known as Cadherin-2, encodes a 907-amino acid protein that includes a 159-amino acid signal sequence. Human and mouse nucleotide sequences are 96% identical. Mouse Ncad gene consists of 16 exons dispersed over more than 200 kb of genomic DNA. Human N-cadherin gene contains 16 exons and its sequence is highly similar to both the mouse NCAD gene (including the large first and second introns) and other cadherin genes. N-cadherin is mapped to 18q11.2. Cadherin regulates dendritic spine morphogenesis.

**Anti – P16 (INK4a)**

ARF; MLM; CMM2; INK4; MTS1; CDK4; CDKN2; INK4a; p16INK4; p16INK4a; CDKN2A

Cat No.	Size	Conjugation	Price	Application	Note
KW325	100 $\mu$ g	—	¥51,000	IC, IH, WB	

**Host** : Mouse **Specificity** : Human  
**Isotype** : IgG2a **Clonality** : Monoclonal Antibody (IMD-16)  
**Immunogen** : Recombinant human p16 protein

**Purity** : Goat anti-mIgG affinity chromatography **Cross Reactivity** : —

p16(INK4A) also known as cyclin-dependent kinase inhibitor 2A(CDKN2A), or multiple tumor suppressor 1(MTS1). The p16 gene (CDKN2A) was mapped to 9p21. The p16 gene encodes a negative regulator of the cell cycle. CDKN2 plays an important role during tumorigenesis or tumor progression in a significant proportion of pancreatic adenocarcinomas. Germ-line mutations in the CDKN2A tumor-suppressor gene have been linked to the development of melanoma in some families with inherited melanoma.

**Anti – P19 (INK4d)**

p19; INK4D; p19-INK4D; CDKN2D; cyclin-dependent kinase inhibitor 2D (p19, inhibits CDK4)

Cat No.	Size	Conjugation	Price	Application	Note
KW326	100 $\mu$ g	—	¥51,000	IC, IH, WB	

**Host** : Mouse **Specificity** : Human  
**Isotype** : IgG1 **Clonality** : Monoclonal Antibody (IMD-19)  
**Immunogen** : Recombinant human p19 protein

**Purity** : Goat anti-mIgG affinity chromatography **Cross Reactivity** : —

Cyclins are important in regulating the cell cycle through their formation of enzymatic complexes with various cyclin-dependent kinases. P19(INK4d) also known as cyclin-dependent kinase inhibitor 2D, is one of the novel members of the mouse INK4 gene family. Okuda et al. (1995) described the cloning of the human INK4d gene (CDKN2D). The predicted 166-amino acid protein is 86% identical to the mouse protein and about 45% identical to other human INK4 family members.

**Anti – P53**

p53; LFS1; TRP53; FLJ92943; TP53; tumor protein p53

Cat No.	Size	Conjugation	Price	Application	Note
KW329	100 $\mu$ g	—	¥51,000	IC, IH, WB	

**Host** : Mouse **Specificity** : Human  
**Isotype** : IgG2a **Clonality** : Monoclonal Antibody (IMD-53)  
**Immunogen** : Recombinant human p19 protein

**Purity** : Goat anti-mIgG affinity chromatography **Cross Reactivity** : —

The p53 tumor antigen is found in increased amounts in a wide variety of transformed cells. The protein is also detectable in many actively proliferating, nontransformed cells, but it is undetectable or present at low levels in resting cells. This protein induces cell cycle arrest or apoptosis in response to sublethal or severe DNA damage, respectively, by differential transcription of target genes and through transcription-independent apoptotic functions. The p53 protein contains 393 amino acids. Human p53 tumour antigen is located to band 17p13. p53 mutations are common in pancreatic cancer and are absent in chronic pancreatitis.

## Anti – Paxillin

PXN; paxillin

Cat No.	Size	Conjugation	Price	Application	Note
KW331	100 $\mu$ g	—	¥51,000	IC, WB	

**Host** : Mouse **Specificity** : Chicken  
**Isotype** : IgG1 **Clonality** : Monoclonal Antibody (IMD-53)  
**Immunogen** : C-terminal part of recombinant chicken paxillin (amino acids 305-559)  
**Purity** : Goat anti-mIgG affinity chromatography **Cross Reactivity** : Human, mouse, rat

The paxillin gene can be alternatively spliced to include 1 of 2 alternative exons, generating beta and gamma isoforms. Paxillin is a 68-kDa focal adhesion protein that is phosphorylated on tyrosine residues in fibroblasts in response to transformation by v-src, treatment with platelet-derived growth factor, or cross-linking of integrins. The 68-kD protein (paxillin) is a cytoskeletal component that localizes to the focal adhesions at the ends of actin stress fibers in chicken embryo fibroblasts. It is also present in the focal adhesions of Madin-Darby bovine kidney (MDBK) epithelial cells but is absent, like talin, from the cell-cell adherens junctions of these cells.

## Anti – MMP8

matrix metalloproteinase 8, HNC; CLG1; PMNL-CL

Cat No.	Size	Conjugation	Price	Application	Note
KW420	100 $\mu$ g	—	¥51,000	IH, WB	

**Host** : Rabbit **Specificity** : Human  
**Isotype** : — **Clonality** : Polyclonal Antibody  
**Immunogen** : Partial peptide of human MMP8 ( N terminal )  
**Purity** : Antigen Affinity Purified **Cross Reactivity** : Mouse, rat

MMP8 (Matrix metalloproteinase 8) is a member of the family of matrix metalloproteinases. It is distinct from the collagenase of skin fibroblasts and synovial cells in substrate specificity and immunologic crossreactivity. MMP8 was mapped to 11q21-q22. MMP8 is an enzyme that degrades fibrillar collagens imparting strength to the fetal membranes, is expressed by leukocytes and chorionic cytotrophoblast cells. The enzyme exhibits 58% homology to human fibroblast collagenase and has the same domain structure. It consists of a 20-residue signal peptide, and an 80-residue propeptide that is lost on autolytic activation by cleavage of an M-L bond. MMP8 was found to possess 57% identity with the deduced protein sequence for fibroblast collagenase with 72% chemical similarity. Matrix metalloproteinases (MMPs) have fundamental roles in tumor progression, but most clinical trials with MMP inhibitors have not shown improvements in individuals with cancer. MMP8 has a paradoxical protective role in cancer and provides a genetic model to evaluate the molecular basis of gender differences in cancer susceptibility.

## Anti – HSP70s

70 kilodalton heat shock proteins

Cat No.	Size	Conjugation	Price	Application	Note
KW427	100 $\mu$ g	—	¥51,000	IC, WB	

**Host** : Rabbit **Specificity** : Human  
**Isotype** : — **Clonality** : Polyclonal Antibody  
**Immunogen** : Partial peptide of human HSP70s ( C terminal )  
**Purity** : Antigen Affinity Purified **Cross Reactivity** : —

The 70 kilodalton heat shock proteins (Hsp70s) are a family of ubiquitously expressed heat shock proteins. The Hsp70s are an important part of the cell's machinery for protein folding, and help to protect cells from stress. All of the Hsp70 proteins have three major functional domains: An N-terminal ATPase domain binds ATP (Adenosine triphosphate) and hydrolyzes it to ADP (Adenosine diphosphate); A substrate binding domain contains a groove with an affinity for neutral, hydrophobic amino acid residues; A C-terminal domain rich in alpha helical structure acts as a 'lid' for the substrate binding domain. By binding tightly to partially-synthesized peptide sequences (incomplete proteins), Hsp70 prevents them from aggregating and being rendered nonfunctional. And it also can act to protect cells from thermal or oxidative stress. Finally, Hsp70 seems to be able to participate in disposal of damaged or defective proteins. Interaction with CHIP (Carboxyl-terminal of Hsp70 Interacting Protein)—an E3 ubiquitin ligase—allows Hsp70 to pass proteins to the cell's ubiquitination and proteolysis pathways.

## Anti – Heparanase

HPA; HPR1; HSE1; HPSE1; HPSE

Cat No.	Size	Conjugation	Price	Application	Note
KW436	100 $\mu$ g	—	¥51,000	WB	

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

Heparanase, also known as HPSE, is an enzyme that acts both at the cell-surface and within the extracellular matrix to degrade polymeric heparan sulfate molecules into shorter chain length oligosaccharides. Heparanase is an endo-beta-D-glucuronidase capable of cleaving heparan sulfate and has been implicated in inflammation and tumor angiogenesis and metastasis. The successful penetration of the endothelial cell layer that lines the interior surface of blood vessels is an important process in the formation of blood borne tumour metastases. Heparan sulfate proteoglycans are major constituents of this layer and it has been shown that increased metastatic potential corresponds with increased heparanase activity for a number of cell lines.

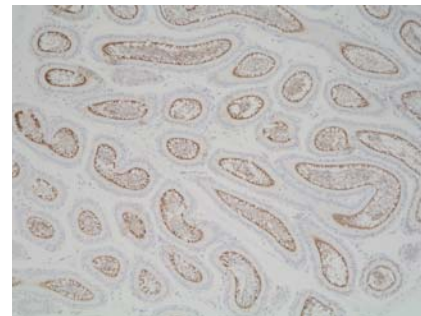
**Anti – Usp11**

MGC6649; KIAA4085; mKIAA4085; 6230415D12Rik; Usp1: ubiquitin specific peptidase 11

Cat No.	Size	Conjugation	Price	Application	Note
KG403	25 µg	—	¥49,000	IH	

**Host** : Rabbit **Specificity** : Mouse  
**Isotype** : IgG1 **Clonality** : Polyclonal Antibody  
**Immunogen** : Partial peptide of mouse Usp11  
**Purity** : Antigen Affinity Purified **Cross Reactivity** : Not tested

Usp11 (ubiquitin specific peptidase 11) possesses Cys box, His box, Asp and KRF domains, which are highly conserved in many ubiquitin-specific proteases. Usp11 is a ubiquitous protein in various tissues and is primarily localized in the nucleus of non-dividing cells. Usp11 binds specifically to RanBPM which is a RanGTP-binding protein required for correct nucleation of microtubules and inhibits its ubiquitination and degradation. It has been also shown that Usp11 is involved in regulation of the TNF α-induced IKK α → p53 signaling pathway and that Usp11 functions in stabilizing HPV-16E7 by reducing ubiquitination and attenuating E7 degradation.



Mouse epididymis (paraffin section)

**Anti – COPZ1**

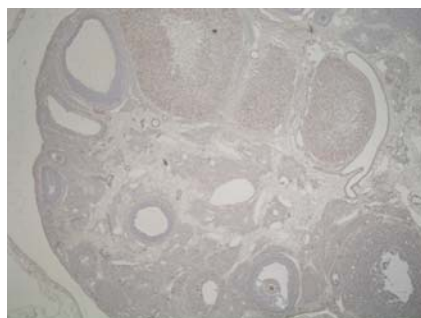
coatamer protein complex, subunit zeta 1: COPZ; CGI-120; zeta1-COP

Cat No.	Size	Conjugation	Price	Application	Note
KC451	50 µg	—	¥55,000	EL,IH	Discontinued*

**Host** : GANP mouse **Specificity** : Human  
**Isotype** : IgG1 **Clonality** : Monoclonal Antibody  
**Immunogen** : Partial peptide of human COPZ1 (N-terminal)  
**Purity** : ProteinG Affinity Purified **Cross Reactivity** : Rat

COP I-coated vesicles are thought to be responsible mainly for retrograde transport of recycled proteins from the Golgi complex and pre-Golgi compartments to the endoplasmic reticulum. The COP I is composed of seven subunits (a, b, b', g, d, e, and z-COPs) of a stable cytosolic protein complex. Recruitment of COP I onto the membrane requires a small GTPase, ADP-ribosylation factor (ARF), which cycles between a GDP-bound inactive and a GTP-bound active form. The GTP-bound ARF triggers assembly of COP I onto Golgi membranes.

\*2009/11/20 We canceled sale.



Rat ovary

**Anti - CEACAM5**

CEA; CD66e; DKFZp781M2392; CEACAM5

Cat No.	Size	Conjugation	Price	Application	Note
KB468	50 µg	-	¥32,000	WB,FCM	-

**Host:** Mouse **Specificity:** Human  
**Isotype:** - **Clonality:** Polyclonal Antibody  
**Immunogen:** Full length of human CEACAM5  
**Purity:** Protein A purified **Cross Reactivity:** -

**Anti - TACSTD1**

KSA; M4S1; MK-1; EGP-2; EGP34; EGP40; KS1/4; MIC18; TROP1; CO-17A; Ep-CAM; hEGP-2; CO17-1A; GA733-2; TACST-1; TACSTD1; EPCAM

Cat No.	Size	Conjugation	Price	Application	Note
KB479	50 µg	-	¥32,000	WB,IF	-

**Host:** Mouse **Specificity:** Human  
**Isotype:** - **Clonality:** Polyclonal Antibody  
**Immunogen:** Full length of human TACSTD1  
**Purity:** Protein A purified **Cross Reactivity:** -

**Anti - MPL**

MPLV; TPOR; C-MPL; CD110; MPL

Cat No.	Size	Conjugation	Price	Application	Note
KB480	50 µg	-	¥32,000	WB,FCM	-

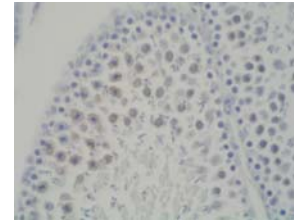
**Host:** Mouse **Specificity:** Human  
**Isotype:** - **Clonality:** Polyclonal Antibody  
**Immunogen:** Full length of human MPL  
**Purity:** Protein A purified **Cross Reactivity:** -

## Anti - DDX39



BAT1; DDXL; BAT1L; URH49; MGC8417; MGC18203; DDX39

Cat No.	Size	Conjugation	Price	Application	Note
KC570	50 µg	-	¥55,000	ELISA,IHC	-
<b>Host:</b>	GANP Mouse		<b>Specificity:</b>	Human	
<b>Isotype:</b>	IgG1,κ		<b>Clonality:</b>	Monoclonal Antibody (2E4)	
<b>Immunogen:</b>	Partial peptide of Human DDX39 (N-terminal)				
<b>Purity:</b>	ProteinG purified		<b>Cross Reactivity:</b> Rat		



Rat testis tissue

## Anti - GRHPR



PH2; GLXR; GLYD

Cat No.	Size	Conjugation	Price	Application	Note
KC595	50	-	¥55,000	ELISA,WB	-
<b>Host:</b>	GANP Mouse		<b>Specificity:</b>	Human	
<b>Isotype:</b>	IgG2b,κ		<b>Clonality:</b>	Monoclonal Antibody (7G1)	
<b>Immunogen:</b>	Partial peptide of Human GRHPR (C-terminal region)				
<b>Purity:</b>	ProteinG		<b>Cross Reactivity:</b> Rat		

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