Heparan sulfate and heparin play key roles in the binding of many growth and differentiation factors, and in signaling by other factors. In view of SulfFP's ability to modify the sulfation of heparan sulfate outside the cell, SulfFPs have been classified as new members of sulfatase family. The SulFP gene is conserved in nematode, fruit fly and human.

SulfFP1 modifies the interaction between heparin binding proteins and the carbohydrate side-chain of heparan sulfate, and has a key role in regulating FGF and Wnt signaling. Changes in SulfFP1 levels in cancer cells have focused attention on SulfFP as a targeting molecule. SulfFP2 is a related enzyme resembling SulfFP1 in structure and activity.

Three SulfFP antibodies are available;
- KM108: Specifically reacts with the rat SulfFP1
- KM109: Specifically reacts with an N-terminal fragment of rat SulfFP2
- KM110: Specifically reacts with a C-terminal fragment of rat SulfFP2

Package Size: 25µg (100µL/vial)
Format: Rabbit polyclonal antibody (0.25mg/mL)
Buffer: PBS [containing 2% Block Ace as a stabilizer, 0.1%Proclin as a bacteriostat]
Storage: Store below -20°C
- Once thawed, store at 4°C. Repeated freeze-thaw cycles should be avoided.

Purification method: This antibody was established from the serum of a rabbit immunized with a N-terminal fragment of rat SulfFP2 (421-564 a.a.), expressed as a recombinant protein in E. coli.
- Purified by Protein G affinity chromatography.

Working dilution:
- For Western blotting: 1.0µg/ml
- For Immunocytochemistry: 8.0µg/ml

Western blotting
Sample: SulfFP2-transfected HEK293 cells supernatants
Preparation of antibodies and instruction:
Masu M. Nagamine S.
University of Tsukuba Graduate School of Comprehensive Human Sciences

Immunocytochemistry
Sample: SulfFP2-transfected HEK293 cells
Anti Rat SulfFP2/sulf-2 Polyclonal Antibody

【Reference】

1. Nagamine S. et al. :
Expression of a heparan sulfate remodeling enzyme, heparan sulfate 6-O-endosulfatase sulfatase FP2, in the rat nervous system.

2. Morimoto-Tomita M. et al. :
Cloning and characterization of two extracellular heparin-degrading endosulfatases in mice and humans.

3. Ai X. et al. :
Substrate Specificity and Domain Functions of Extracellular Heparan Sulfate 6-O-Endosulfatases, QSulf1 and QSulf2.