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Goat Anti-SUMF1 Antibody

Peptide-affinity purified goat antibody
Catalog # AF2196a

Specification

Goat Anti-SUMF1 Antibody - Product Information

Application	**WB**
Primary Accession	Q8NBK3
Other Accession	NP_877437, 285362, 58911 (mouse), 362409 (rat)
Reactivity	**Human, Mouse**
Predicted	**Rat, Dog, Cow**
Host	**Goat**
Clonality	**Polyclonal**
Concentration	**100ug/200ul**
Isotype	**IgG**
Calculated MW	**40556**

Goat Anti-SUMF1 Antibody - Additional Information

Gene ID 285362

Other Names
Sulfatase-modifying factor 1, 1.8.99.-, C-alpha-formylglycine-generating enzyme 1, SUMF1, FGE

Format
0.5 mg IgG/ml in Tris saline (20mM Tris pH7.3, 150mM NaCl), 0.02% sodium azide, with 0.5% bovine serum albumin

Storage
Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions
Goat Anti-SUMF1 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

Goat Anti-SUMF1 Antibody - Protein Information

Name SUMF1 {ECO:0000303|PubMed:12757706, ECO:0000312|HGNC:HGNC:20376}

Function
Oxidase that catalyzes the conversion of cysteine to 3- oxoalanine on target proteins, using molecular oxygen and an unidentified reducing agent (PubMed:12757706, PubMed:15657036, PubMed:15907468, PubMed:<a

href="http://www.uniprot.org/citations/25931126" target="_blank">25931126, PubMed:16368756, PubMed:21224894). 3-oxoalanine modification, which is also named formylglycine (fGly), occurs in the maturation of arylsulfatases and some alkaline phosphatases that use the hydrated form of 3-oxoalanine as a catalytic nucleophile (PubMed:12757706, PubMed:15657036, PubMed:15907468, PubMed:25931126, PubMed:16368756). Known substrates include GALNS, ARSA, STS and ARSE (PubMed:12757706, PubMed:15907468, PubMed:15657036).

Cellular Location
Endoplasmic reticulum lumen

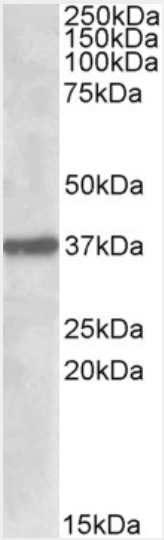
Tissue Location
Ubiquitous. Highly expressed in kidney, pancreas and liver. Detected at lower levels in leukocytes, lung, placenta, small intestine, skeletal muscle and heart

Goat Anti-SUMF1 Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

Goat Anti-SUMF1 Antibody - Images



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AF2196a (1 µg/ml) staining of Mouse Pancreas lysate (35 µg protein in RIPA buffer). Primary incubation was 1 hour. Detected by chemiluminescence.

Goat Anti-SUMF1 Antibody - Background

This gene encodes an enzyme that catalyzes the hydrolysis of sulfate esters by oxidizing a cysteine residue in the substrate sulfatase to an active site 3-oxoalanine residue, which is also known as C-alpha-formylglycine. Mutations in this gene cause multiple sulfatase deficiency, a lysosomal storage disorder. Alternative splicing results in multiple transcript variants.

Goat Anti-SUMF1 Antibody - References

Genetic variation influences glutamate concentrations in brains of patients with multiple sclerosis. Baranzini SE, et al. Brain, 2010 Sep. PMID 20802204.
Characterization of the arylsulfatase I (ARSI) gene preferentially expressed in the human retinal pigment epithelium cell line ARPE-19. Oshikawa M, et al. Mol Vis, 2009. PMID 19262745.
Total deletion and a missense mutation of ITPR1 in Japanese SCA15 families. Hara K, et al. Neurology, 2008 Aug 19. PMID 18579805.
Multiple sulfatase deficiency in a Turkish family resulting from a novel mutation. Yi? U, et al. Brain Dev, 2008 May. PMID 18509892.
Multistep, sequential control of the trafficking and function of the multiple sulfatase deficiency gene product, SUMF1 by PDI, ERGIC-53 and ERp44. Fraldi A, et al. Hum Mol Genet, 2008 Sep 1. PMID 18508857.