

**SUMF1 Antibody (C-Term)**  
**Affinity Purified Rabbit Polyclonal Antibody (Pab)**  
**Catalog # AP9966A**

**Specification**

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**SUMF1 Antibody (C-Term) - Product Information**

Application	FC, IHC-P, WB,E
Primary Accession	<a href="#">Q8NBK3</a>
Other Accession	<a href="#">Q0P5L5</a>
Reactivity	Human
Predicted	Bovine
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Calculated MW	40556
Antigen Region	303-331

**SUMF1 Antibody (C-Term) - Additional Information**

**Gene ID** 285362

**Other Names**

Sulfatase-modifying factor 1, 1899-, C-alpha-formylglycine-generating enzyme 1, SUMF1, FGE

**Target/Specificity**

This SUMF1 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 303-331 amino acids from the C-terminal region of human SUMF1.

**Dilution**

FC~~1:10~50

IHC-P~~1:50~100

WB~~1:1000

E~~Use at an assay dependent concentration.

**Format**

Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.

**Storage**

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

**Precautions**

SUMF1 Antibody (C-Term) is for research use only and not for use in diagnostic or therapeutic procedures.

**SUMF1 Antibody (C-Term) - 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:[16368756](#), PubMed:[21224894](#), PubMed:[25931126](#)). 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:[16368756](#), PubMed:[25931126](#)). Known substrates include GALNS, ARSA, STS and ARSE (PubMed:[12757706](#), PubMed:[15657036](#), PubMed:[15907468](#)).

**Cellular Location**

Endoplasmic reticulum lumen

**Tissue Location**

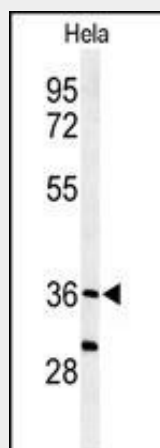
Ubiquitous. Highly expressed in kidney, pancreas and liver. Detected at lower levels in leukocytes, lung, placenta, small intestine, skeletal muscle and heart

**SUMF1 Antibody (C-Term) - Protocols**

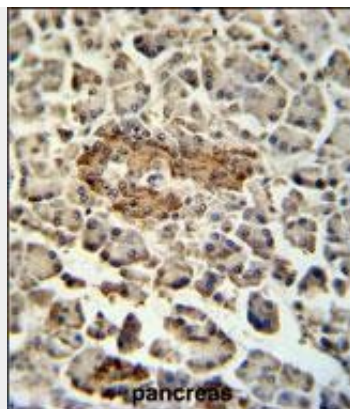
Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

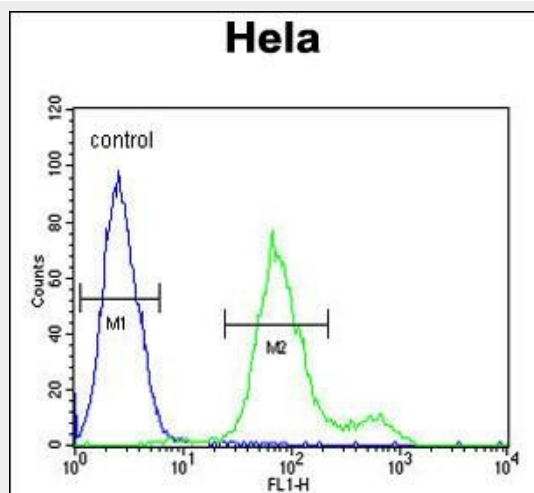
**SUMF1 Antibody (C-Term) - Images**



Western blot analysis of SUMF1 Antibody (C-Term) (Cat. #AP9966a) in HeLa cell line lysates (35ug/lane). SUMF1 (arrow) was detected using the purified Pab.



SUMF1 Antibody (C-Term) (Cat. #AP9966a) immunohistochemistry analysis in formalin fixed and paraffin embedded human pancreas tissue followed by peroxidase conjugation of the secondary antibody and DAB staining. This data demonstrates the use of the SUMF1 Antibody (C-Term) for immunohistochemistry. Clinical relevance has not been evaluated.



SUMF1 Antibody (C-Term) (Cat. #AP9966a) flow cytometric analysis of Hela cells (right histogram) compared to a negative control cell (left histogram). FITC-conjugated goat-anti-rabbit secondary antibodies were used for the analysis.

### **SUMF1 Antibody (C-Term) - Background**

SUMF1 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.

### **SUMF1 Antibody (C-Term) - References**

- Oshikawa, M., et al. Mol. Vis. 15, 482-494 (2009)
- Fraldi, A., et al. Hum. Mol. Genet. 17(17):2610-2621(2008)
- Hara, K., et al. Neurology 71(8):547-551(2008)
- Yis, U., et al. Brain Dev. 30(5):374-377(2008)