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PAPSS1 Antibody (N-term K9)

Purified Rabbit Polyclonal Antibody (Pab)

Catalog # AP2607a

Specification

PAPSS1 Antibody (N-term K9) - Product Information

Application	**WB,E**
Primary Accession	O43252
Other Accession	Q60967, NP_005434
Reactivity	**Human**
Predicted	**Mouse**
Host	**Rabbit**
Clonality	**Polyclonal**
Isotype	**Rabbit IgG**
Antigen Region	**1-30**

PAPSS1 Antibody (N-term K9) - Additional Information

Gene ID 9061

Other Names
Bifunctional 3'-phosphoadenosine 5'-phosphosulfate synthase 1, PAPS synthase 1, PAPSS 1, Sulfurylase kinase 1, SK 1, SK1, Sulfate adenylyltransferase, ATP-sulfurylase, Sulfate adenylate transferase, SAT, Adenylyl-sulfate kinase, 3'-phosphoadenosine-5'-phosphosulfate synthase, APS kinase, Adenosine-5'-phosphosulfate 3'-phosphotransferase, Adenylylsulfate 3'-phosphotransferase, PAPSS1, ATPSK1, PAPSS

Target/Specificity
This PAPSS1 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 1-30 amino acids from the N-terminal region of human PAPSS1.

Dilution
WB~~1:1000

Format
Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is prepared by Saturated Ammonium Sulfate (SAS) precipitation followed by dialysis against PBS.

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
PAPSS1 Antibody (N-term K9) is for research use only and not for use in diagnostic or therapeutic procedures.

PAPSS1 Antibody (N-term K9) - Protein Information

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Name PAPSS1

Synonyms ATPSK1, PAPSS

Function Bifunctional enzyme with both ATP sulfurylase and APS kinase activity, which mediates two steps in the sulfate activation pathway. The first step is the transfer of a sulfate group to ATP to yield adenosine 5'-phosphosulfate (APS), and the second step is the transfer of a phosphate group from ATP to APS yielding 3'-phosphoadenylylsulfate (PAPS: activated sulfate donor used by sulfotransferase). In mammals, PAPS is the sole source of sulfate; APS appears to be only an intermediate in the sulfate-activation pathway (PubMed:14747722, PubMed:9576487, PubMed:9648242, PubMed:9668121). Required for normal biosynthesis of sulfated L-selectin ligands in endothelial cells (PubMed:9576487).

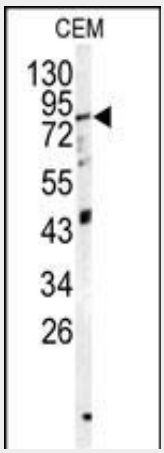
Tissue Location
Expressed in testis, pancreas, kidney, thymus, prostate, ovary, small intestine, colon, leukocytes and liver. Also expressed in high endothelial venules (HEV) cells and in cartilage

PAPSS1 Antibody (N-term K9) - 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

PAPSS1 Antibody (N-term K9) - Images



Western blot analysis of PAPSS1 antibody (N-term K9) (Cat.# AP2607a) in CEM cell line lysates (35ug/lane). PAPSS1 (arrow) was detected using the purified Pab.

PAPSS1 Antibody (N-term K9) - Background

Three-prime-phosphoadenosine 5-prime-phosphosulfate (PAPS) is the sulfate donor cosubstrate for all sulfotransferase (SULT) enzymes. SULTs catalyze the sulfate conjugation of many endogenous and exogenous compounds, including drugs and other xenobiotics. In humans, PAPS is synthesized

from adenosine 5-prime triphosphate (ATP) and inorganic sulfate by 2 isoforms, PAPSS1 and PAPSS2.

PAPSS1 Antibody (N-term K9) - References

Venkatachalam, K.V., IUBMB Life 55(1):1-11 (2003).
Xu, Z.H., et al., Biochem. Biophys. Res. Commun. 268(2):437-444 (2000).
Venkatachalam, K.V., et al., J. Biol. Chem. 273(30):19311-19320 (1998).
ul Haque, M.F., et al., Nat. Genet. 20(2):157-162 (1998).
Girard, J.P., et al., FASEB J. 12(7):603-612 (1998).

PAPSS1 Antibody (N-term K9) - Citations

- The sphingosine 1-phosphate receptor 5 and sphingosine kinases 1 and 2 are localised in centrosomes: possible role in regulating cell division.