

PAPSS1 Antibody (N-term K9) Blocking Peptide

Synthetic peptide

Catalog # BP2607a

Specification**PAPSS1 Antibody (N-term K9) Blocking Peptide - Product Information**

Primary Accession [O43252](#)
Other Accession [NP_005434](#)

PAPSS1 Antibody (N-term K9) Blocking Peptide - 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 adenylyl
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

The synthetic peptide sequence used to
generate the antibody [AP2607a](#) was
selected from the N-term region of human
PAPSS1 . A 10 to 100 fold molar excess to
antibody is recommended. Precise
conditions should be optimized for a
particular assay.

Format

Peptides are lyophilized in a solid powder
format. Peptides can be reconstituted in
solution using the appropriate buffer as
needed.

Storage

Maintain refrigerated at 2-8°C for up to 6
months. For long term storage store at
-20°C.

Precautions**PAPSS1 Antibody (N-term K9) Blocking Peptide - 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) Blocking Peptide - 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).

This product is for research use only. Not for use in diagnostic or therapeutic procedures.

PAPSS1 Antibody (N-term K9) Blocking Peptide - Protein Information

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:9576487, PubMed:9668121, PubMed:9648242, PubMed:14747722). 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) Blocking Peptide - Protocols

Provided below are standard protocols that you

may find useful for product applications.

- [Blocking Peptides](#)