

## PAPSS1/PAPSS2 Antibody (N-term) Blocking Peptide

Synthetic peptide Catalog # BP2607d

## **Specification**

PAPSS1/PAPSS2 Antibody (N-term) Blocking Peptide - Product Information

Primary Accession <u>095340</u>

PAPSS1/PAPSS2 Antibody (N-term) Blocking Peptide - Additional Information

**Gene ID 9060** 

### **Other Names**

Bifunctional 3'-phosphoadenosine 5'-phosphosulfate synthase 2, PAPS synthase 2, PAPSS 2, Sulfurylase kinase 2, SK 2, SK2, 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, PAPSS2, ATPSK2

### Target/Specificity

The synthetic peptide sequence used to generate the antibody <a href=/product/pr oducts/AP2607d>AP2607d</a> was selected from the N-term region of human PAPSS1/PAPSS2. 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**

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

## PAPSS1/PAPSS2 Antibody (N-term) 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/PAPSS2 Antibody (N-term) 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).



procedures.

PAPSS1/PAPSS2 Antibody (N-term) Blocking Peptide - Protein Information

Name PAPSS2

Synonyms ATPSK2

### **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. May have an important role in skeletogenesis during postnatal growth (By similarity).

### **Tissue Location**

Expressed in cartilage and adrenal gland.

# PAPSS1/PAPSS2 Antibody (N-term) Blocking Peptide - Protocols

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

• Blocking Peptides