10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

PAPSS2 Antibody (C-term)

Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP8091b

Specification

PAPSS2 Antibody (C-term) - Product Information

Application	**WB, IHC-P,E**
Primary Accession	O95340
Other Accession	NP_001015880
Reactivity	**Human**
Host	**Rabbit**
Clonality	**Polyclonal**
Isotype	**Rabbit IgG**
Calculated MW	**69501**
Antigen Region	**544-574**

PAPSS2 Antibody (C-term) - 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
This PAPSS2 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 544-574 amino acids from the C-terminal region of human PAPSS2.

Dilution
WB~~1:1000
IHC-P~~1:50~100

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
PAPSS2 Antibody (C-term) is for research use only and not for use in diagnostic or therapeutic procedures.

PAPSS2 Antibody (C-term) - Protein Information

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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, the activated sulfate donor used by sulfotransferases (PubMed:11773860, PubMed:19474428, PubMed:23824674, PubMed:25594860). In mammals, PAPS is the sole source of sulfate while APS appears to only be an intermediate in the sulfate-activation pathway (PubMed:11773860, PubMed:19474428, PubMed:23824674, PubMed:25594860). Plays indirectly an important role in skeletogenesis during postnatal growth (PubMed:9771708).

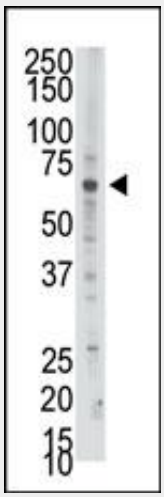
Tissue Location
Expressed in cartilage and adrenal gland.

PAPSS2 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 Cytomety
- Cell Culture

PAPSS2 Antibody (C-term) - Images



The anti-PAPSS2 Pab (Cat. #AP8091b) is used in Western blot to detect PAPSS2 in Jurkat cell lysate.

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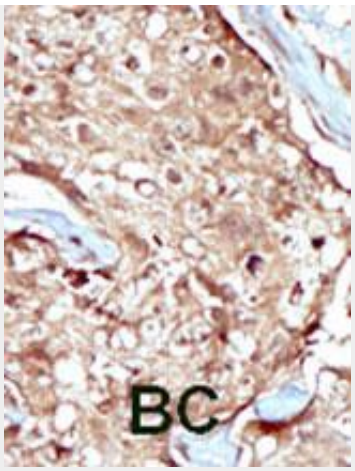

Formalin-fixed and paraffin-embedded human cancer tissue reacted with the primary antibody, which was peroxidase-conjugated to the secondary antibody, followed by AEC staining. This data demonstrates the use of this antibody for immunohistochemistry; clinical relevance has not been evaluated. BC = breast carcinoma; HC = hepatocarcinoma.

PAPSS2 Antibody (C-term) - 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.

PAPSS2 Antibody (C-term) - References

Xu, Z.H., et al., Biochem. Biophys. Res. Commun. 268(2):437-444 (2000).
Kurima, K., et al., J. Biol. Chem. 274(47):33306-33312 (1999).
ul Haque, M.F., et al., Nat. Genet. 20(2):157-162 (1998).
Kurima, K., et al., Proc. Natl. Acad. Sci. U.S.A. 95(15):8681-8685 (1998).
Shimizu, C., et al., Biochem. J. 363 (Pt 2), 263-271 (2002).