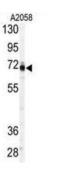


3'-Phosphoadenosine 5'-Phosphosulfate Synthase 1 (PAPSS1) Antibody

Catalogue No.:abx031631



Sulfotransferase (SULT) enzymes catalyze the sulfate conjugation of many drugs, xenobiotic compounds, hormones, and neurotransmitters. 3'-phosphoadenosine 5'-phosphosulfate (PAPS) synthase (PAPSS) catalyzes the biosynthesis of PAPS which serves as the universal sulfonate donor compound for all sulfotransferase reactions. In humans, PAPS is synthesized from adenosine 5-prime triphosphate (ATP) and inorganic sulfate by 2 isoforms, PAPSS1 and PAPSS2 (603005). Bifunctional PAPSS1 is comprised of an N-terminal APS kinase domain, and a C-terminal ATP sulfurylase domain. Full-length protein has significantly less APS kinase activity than the N-terminal fragment, suggesting that the C-terminal domain exerts a regulatory role on the N-terminal APS kinase activity. In humans there are two major isoforms: PAPSS1 and PAPSS2. In brain and skin PAPSS1 is the major isoform, whereas in liver, cartilage and adrenal glands PAPSS2 isoform expression dominates. The predicted 623-amino acid protein is 98% identical to mouse PAPS synthase. The N-terminal 268-amino acid region of human PAPS synthase resembles APS kinases from other organisms and contains 3 conserved nucleotide-binding motifs.

Target:	3'-Phosphoadenosine 5'-Phosphosulfate Synthase 1 (PAPSS1)	
Clonality:	Polyclonal	
Reactivity:	Human	
Tested Applications:	ELISA, WB	
Host:	Rabbit	
Recommended dilutions	: WB: 1/1000. Optimal dilutions/concentrations should be determined by the end user.	
Conjugation:	Unconjugated	
Immunogen:	KLH-conjugated synthetic peptide between 592-624 amino acids from the C-terminal region of human PAPSS1.	
lsotype:	lgG	
Form:	Liquid	
Purification:	Purified through a protein G column, eluted with high and low pH buffers and neutralized immediately, followed by dialysis against PBS.	
v1.0.0	Abbexa LTD, Cambridge, UK · Phone: +44 (0) 1223 755950 · Fax: +44 (0) 1223 755951 Abbexa LLC, Houston, TX USA · Phone: +1 832 327 7413 Abbexa BV, Leiden, NL Website: www.abbexa.com · Email: info@abbexa.com	1 of 2

Datasheet Version: 2.0.0 Revision date: 27 Jun 2025



Storage:	Aliquot and store at -20°C. Avoid repeated freeze/thaw cycles.
UniProt Primary AC:	O43252 (<u>UniProt</u> , <u>ExPASy</u>)
Gene Symbol:	PAPSS1
NCBI Accession:	NP_005434.4
KEGG:	hsa:9061
String:	<u>9606.ENSP00000265174</u>
Molecular Weight:	Calculated MW: 70.8 kDa
Buffer:	PBS containing 0.09% sodium azide.
Note:	THIS PRODUCT IS FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC, THERAPEUTIC OR COSMETIC PROCEDURES. NOT FOR HUMAN OR ANIMAL CONSUMPTION.