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SEPHS1 Rabbit pAb

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Catalog # AP57603

Product Information

Application	WB
Primary Accession	P49903
Reactivity	Mouse
Predicted	Rat, Pig, Dog, Human, Rabbit, Chicken, Horse
Host	Rabbit
Clonality	Polyclonal
Calculated MW	42911
Physical State	Liquid
Immunogen	KLH conjugated synthetic peptide derived from human SEPHS1
Epitope Specificity	2-100/392
Isotype	IgG
Purity	affinity purified by Protein A
Buffer	0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol.
Important Note	This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.
Background Descriptions	This gene encodes an enzyme that synthesizes selenophosphate from selenide and ATP. Selenophosphate is the selenium donor used to synthesize selenocysteine, which is co-translationally incorporated into selenoproteins at in-frame UGA codons. [provided by RefSeq, Sep 2010]

Additional Information

Gene ID	22929
Other Names	Zincore component SEPHS1, Selenide, water dikinase 1, 2.7.9.3, Selenium donor protein 1, Selenophosphate synthase 1, SEPHS1 {ECO:0000303|PubMed:40608935, ECO:0000312|HGNC:HGNC:19685}
Dilution	WB=1:500-2000
Storage	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.

Protein Information

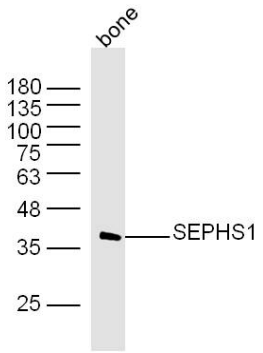
Name	SEPHS1 {ECO:0000303|PubMed:40608935, ECO:0000312|HGNC:HGNC:19685}

Function	Core component of the zincore complex, a heterotetramer that acts as a molecular 'grip' to stabilize transcription factors at DNA- binding sites across the genome, thereby controlling gene expression (PubMed:40608935). The zincore complex binds specifically to zinc finger transcription factors, such as ZFP91, ZNF652, ZNF526 and PRDM15, and stabilizes them onto their cognate DNA motif (PubMed:40608935). Within the complex, SEPHS1, recognizes and binds the backbone of zinc fingers of transcription factors in a sequence-independent manner via its arginine clamp, enhancing their DNA-binding stability (PubMed:40608935). Plays an essential role in redox homeostasis (PubMed:31607477). May also be involved in selenocysteine biosynthesis by catalyzing formation of selenophosphate from selenide and ATP (PubMed:7665581). Its role in selenocysteine biosynthesis is however unclear and several studies suggest that it does not act as a selenophosphate synthase in vivo or plays an non-essential role (PubMed:15534230). Required for cardiac differentiation (By similarity).
Cellular Location	Nucleus. Chromosome. Cytoplasm Note=The zincore complex binds to a highly conserved promoter motif (5'-CTTTAAR-3'). [Isoform 2]: Cytoplasm [Isoform 4]: Cytoplasm
Tissue Location	[Isoform 1]: Gradually expressed during the cell cycle until G2/M phase and then decreases [Isoform 3]: Gradually expressed during the cell cycle until S phase and then decreases.

Background

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Images



Protein: bone(mouse) lysate at 40ug;
Primary: rabbit Anti-SEPHS1(AP57603) at 1:300;
Secondary: IRDye800CW Goat Anti-Rabbit IgG at 1/20000 dilution
Predicted band size: 43 kD
Observed band size: 36 kD

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.