

DPP6 Polyclonal Antibody

Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP59101

Product Information

Application Primary Accession Reactivity Host Clonality Calculated MW Physical State Immunogen Epitope Specificity Isotype Purity	WB, IHC-P, IHC-F, IF, ICC, E P42658 Rat, Dog, Bovine Rabbit Polyclonal 97588 Liquid KLH conjugated synthetic peptide derived from human DPP6 401-500/865 IgG affinity purified by Protein A
Buffer SUBCELLULAR LOCATION SIMILARITY SUBUNIT DISEASE	0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol. Membrane; Single-pass type II membrane protein (Probable). Belongs to the peptidase S9B family. Homodimer. Binds KCND2. Defects in DPP6 are the cause of familial paroxysmal ventricular fibrillation type 2 (VF2) [MIM:612956]. A cardiac arrhythmia marked by fibrillary contractions of the ventricular muscle due to rapid repetitive excitation of myocardial fibers without coordinated contraction of the ventricle and by absence of atrial activity. Note=A genetic variation 340 bases upstream from the ATG start site of the DPP6 gene is the cause of familial paroxysmal ventricular fibrillation type 2.
Important Note	This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.
Background Descriptions	DPP6 is a Type-II serine proteinase of the clan SC. The clan SC proteinases have a catalytic triad of Ser-Asp-His, and like other Serine proteinases, the active site serine is in a Gly-Xaa-Ser-Xaa -Gly orientation. DPP6 has an Asp instead of Ser in the catalytic site. DPP6 is a member of a broader family of dipeptidyl peptidases including DPP4, FAP/Seprase, DPP2, DPP8, DPP9, DPP10, which have differing substrate specificity and tissue localizations. The surface-bound DPP6 is a homodimer, and cleavage of in the stalk region releases a shed form of DPP6. The shed is the form found in serum. DPP6 has been found in highest abundance in the brain, but also in the kidney, liver and lung.

Additional Information

Gene ID	1804
Other Names	Dipeptidyl aminopeptidase-like protein 6, DPPX, Dipeptidyl aminopeptidase-related protein, Dipeptidyl peptidase 6, Dipeptidyl peptidase

	IV-like protein, Dipeptidyl peptidase VI, DPP VI, DPP6
Target/Specificity	Expressed predominantly in brain.
Dilution	WB=1:500-2000,IHC-P=1:100-500,IHC-F=1:100-500,ICC=1:100-500,IF=1:50-200, ELISA=1:5000-10000
Format	0.01M TBS(pH7.4) with 1% BSA, 0.09% (W/V) sodium azide and 50% Glyce
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	DPP6 (<u>HGNC:3010</u>)
Function	Promotes cell surface expression of the potassium channel KCND2 (PubMed: <u>15454437</u> , PubMed: <u>19441798</u>). Modulates the activity and gating characteristics of the potassium channel KCND2 (PubMed: <u>18364354</u>). Has no dipeptidyl aminopeptidase activity (PubMed: <u>15476821</u> , PubMed: <u>8103397</u>).
Cellular Location	Cell membrane; Single-pass type II membrane protein
Tissue Location	Expressed predominantly in brain.

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