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

PAFAHG Polyclonal Antibody

Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP59417

Product Information

Application	IHC-P, IHC-F, IF, E
Primary Accession	Q15102
Reactivity	Rat, Pig, Dog, Bovine
Host	Rabbit
Clonality	Polyclonal
Calculated MW	25734
Physical State	Liquid
Immunogen	KLH conjugated synthetic peptide derived from human PAFAH1B3/PAFAHG
Epitope Specificity	1-100/231
Isotype	IgG
Purity	affinity purified by Protein A
Buffer	0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol.
SUBCELLULAR LOCATION	Cytoplasm.
SIMILARITY	Belongs to the 'GDSL' lipolytic enzyme family.Platelet-activating factor acetylhydrolase IB beta/gamma subunitssubfamily.
SUBUNIT	Cytosolic PAF-AH IB is formed of three subunits of 45 kDa(alpha), 30 kDa (beta) and 29 kDa (gamma). The catalytic activityof the enzyme resides in the beta and gamma subunits, whereas thealpha subunit has regulatory activity. Trimer formation is notessential for the catalytic activity.
Important Note	This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.
Background Descriptions	The platelet activating factor (PAF) acetylhydrolases catalyze hydrolysis of the sn-2 ester bond of PAF and related pro-inflammatory phospholipids and thus attenuate their bioactivity. The family of PAF acetylhydrolases includes one secreted plasma isozyme and two intracellular isozymes. The intracellular isozymes are distinguished by differences in their primary sequence, tissue localization, subunit composition and substrate preferences. The most thoroughly characterized intracellular isoform, PAFAH1B, is a heterotrimeric protein expressed in brain tissue and plays and important role in brain development and function. PAFAH1B is comprised of a regulatory subunit (LIS1) and two homologous (63% identity) catalytic subunits (PAFAH1B2 and PAFAH1B3), which harbor all the activity of the enzyme. The PAFAH1B2 and PAFAH1B3 subunits readily associate with very high affinity to form heterodimers, and this dimerization is essential for both stability and catalytic activity. PAFAH1B3 is also commonly known as PAFAH1B 29kDa subunit, PAFAH1B subunit or PAFAH1B subunit α1.

Additional Information

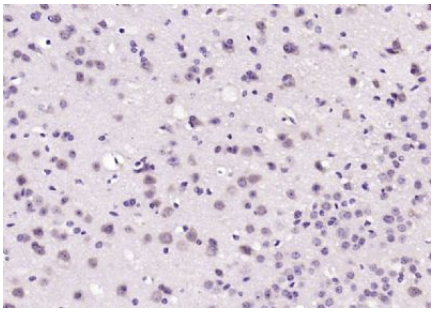
Gene ID	5050

Other Names	Platelet-activating factor acetylhydrolase IB subunit alpha1, 3.1.1.47, PAF acetylhydrolase 29 kDa subunit, PAF-AH 29 kDa subunit, PAF-AH subunit gamma, PAFAH subunit gamma, PAFAH1B3 (HGNC:8576), PAFAHG
Target/Specificity	In the adult, expressed in brain, skeletal muscle, kidney, thymus, spleen, colon, testis, ovary and peripheral blood leukocytes. In the fetus, highest expression occurs in brain.
Dilution	IHC-P=1:100-500,IHC-F=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

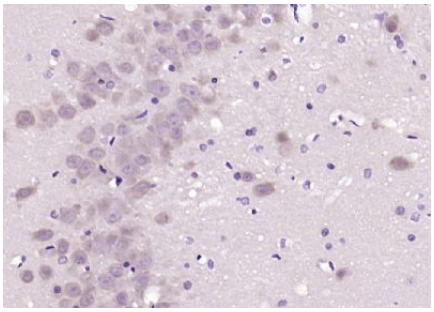
Name	PAFAH1B3 (HGNC:8576)
Synonyms	PAFAHG
Function	Alpha1 catalytic subunit of the cytosolic type I platelet- activating factor (PAF) acetylhydrolase (PAF-AH (I)) heterotetrameric enzyme that catalyzes the hydrolyze of the acetyl group at the sn-2 position of PAF and its analogs and modulates the action of PAF. The activity and substrate specificity of PAF-AH (I) are affected by its subunit composition. Both alpha1/alpha1 homodimer (PAFAH1B3/PAFAH1B3 homodimer) and alpha1/alpha2 heterodimer(PAFAH1B3/PAFAH1B2 heterodimer) hydrolyze 1-O-alkyl-2-acetyl-sn-glycero-3-phosphoric acid (AAGPA) more efficiently than PAF, but they have little hydrolytic activity towards 1-O-alkyl-2-acetyl-sn-glycero-3-phosphorylethanolamine (AAGPE). Plays an important role during the development of brain.
Cellular Location	Cytoplasm.
Tissue Location	In the adult, expressed in brain, skeletal muscle, kidney, thymus, spleen, colon, testis, ovary and peripheral blood leukocytes. In the fetus, highest expression occurs in brain

Images



Paraformaldehyde-fixed, paraffin embedded (mouse brain); Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15min; Block endogenous peroxidase by 3% hydrogen peroxide for 20 minutes; Blocking buffer (normal goat serum) at 37°C for 30min; Antibody incubation with (PAFAHG) Polyclonal Antibody, Unconjugated (AP59417) at 1:200 overnight at 4°C, followed by operating according to SP Kit(Rabbit) (sp-0023) instructionsand DAB staining.

Paraformaldehyde-fixed, paraffin embedded (rat brain); Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15min; Block endogenous peroxidase by 3%



hydrogen peroxide for 20 minutes; Blocking buffer (normal goat serum) at 37°C for 30min; Antibody incubation with (PAFAHG) Polyclonal Antibody, Unconjugated (AP59417) at 1:200 overnight at 4°C, followed by operating according to SP Kit(Rabbit) (sp-0023) instructionsand DAB staining.