

PRODUCT INFORMATION



PAF Acetylhydrolase (human, recombinant)

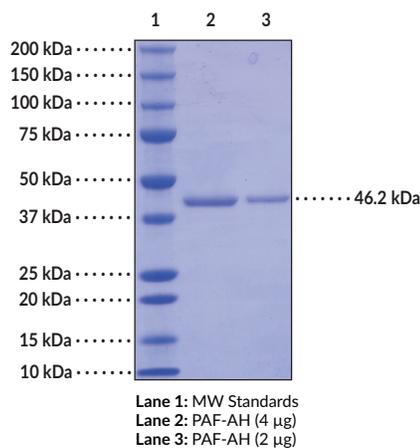
Item No. 10279

Overview and Properties

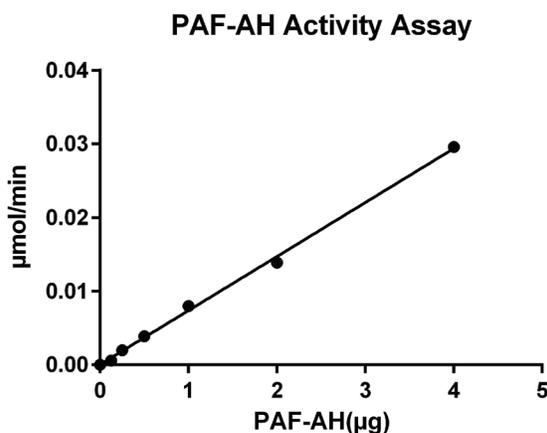
Synonyms:	Group-VIIA phospholipase A ₂ , LDL-PLA(2), Lipoprotein PLA ₂ , PAF-AH, PLA ₂ G7, gVIIA-PLA ₂ , Lp-PLA ₂ , Platelet-activating Factor-Acetylhydrolase
Source:	Active recombinant N-terminal hexahistidine-tagged protein expressed in <i>E. coli</i>
Amino acids:	42-441 (full-length)
Uniprot No.:	Q13093
Molecular Weight:	46.4 kDa
Storage:	-80°C (as supplied); avoid freeze/thaw cycles by aliquoting protein
Stability:	≥2 years
Purity:	≥75% estimated by SDS-PAGE
Supplied in:	50 mM sodium phosphate, pH 7.2, with 100 mM sodium chloride and 10% glycerol
Protein Concentration:	<i>batch specific</i> mg/ml
Activity:	<i>batch specific</i> U/ml
Specific Activity:	<i>batch specific</i> U/mg
Unit Definition:	One unit is defined as the amount of enzyme required to produce 1 μmol of TNB per minute at 37°C in buffer containing 100 mM Tris-HCl, pH 7.2, and 300 μM of the substrate 2-thio PAF (Item No. 60945).

Information represents the product specifications. Batch specific analytical results are provided on each certificate of analysis.

Images



Representative gel image shown; actual purity may vary between each batch.



WARNING
THIS PRODUCT IS FOR RESEARCH ONLY - NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

SAFETY DATA
This material should be considered hazardous until further information becomes available. Do not ingest, inhale, get in eyes, on skin, or on clothing. Wash thoroughly after handling. Before use, the user must review the complete Safety Data Sheet, which has been sent via email to your institution.

WARRANTY AND LIMITATION OF REMEDY
Buyer agrees to purchase the material subject to Cayman's Terms and Conditions. Complete Terms and Conditions including Warranty and Limitation of Liability information can be found on our website.

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Description

Platelet-activating factor (PAF) is an important lipid mediator involved in inflammation. PAF-acetylhydrolase (PAF-AH) is an extracellular phospholipase A₂ which hydrolyzes the acetyl group at the *sn*-2 position of phospholipids.¹ Two main types of PAF-AH have been characterized, namely the secreted (*i.e.* plasma) and intracellular enzymes, which are encoded on individual genes and share only 41% homology at the amino acid level.^{2,3} Cayman's PAF-AH is the secreted calcium-independent isoform. PAF deacetylation by PAF-AH causes loss of biological activity, making PAF-AH potentially useful as an anti-inflammation therapy.

References

1. Tjoelker, L.W., Wilder, C., Eberhardt, C., *et al.* Anti-inflammatory properties of a platelet-activating factor acetylhydrolase. *Nature* **374(6522)**, 549-553 (1995).
2. Stafforini, D.M., McIntyre, T.M., Zimmerman, G.A., *et al.* Platelet-activating factor acetylhydrolases. *J. Biol. Chem.* **272(29)**, 17895-17898 (1997).
3. Hattori, K., Adachi, H., Matsuzawa, A., *et al.* cDNA cloning and expression of intracellular platelet-activating factor (PAF) acetylhydrolase II. Its homology with plasma PAF acetylhydrolase. *J. Biol. Chem.* **271(51)**, 33032-33038 (1996).

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