



# Recombinant Human PAF-AH

20190729BB



**FOR RESEARCH ONLY! NOT FOR HUMAN USE!**

<b>Cat.-no.:</b>	<b>100-423S</b>
<b>Size:</b>	5 µg
<b>Lot. No.:</b>	According to product label

## Scientific Background

<b>Gene-ID (NCBI):</b>	5049
<b>Synonyms:</b>	PAF-acetylhydrolase, PAF 2-acylhydrolase, LDL-PLA82, 2-acetyl-1-alkylglycerophosphocholine esterase

Platelet Activating Factor (PAF) is a biologically active phospholipid, which exerts primarily proinflammatory activities by specifically signaling through G-protein-coupled receptors on platelets, neutrophils, and monocytes. Platelet Activating Factor Acetylhydrolase (PAF-AH) is a secreted protein that mediates PAF activity by specifically catalyzing hydrolysis of the “sn2” ester bond, resulting in the conversion of PAF to the biologically inactive lyso-PAF. PAF-AH can also interact with LDL particles to induce the hydrolysis of LDL associated, oxidized phospholipids, generating lysophosphatidylcholine (lyso-PC) and other lysophospholipids. Recombinant PAF-AH is a 420 amino acid glycoprotein which migrates with an apparent molecular mass of 47-55 kDa by SDS-PAGE analysis.

### Sequence

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FDWQYINPVA HMKSSAWVNK IQVLMMAASF GQTKIPRGNG
PYSVGCTDLM FDHTNKGTFI RLYYPSQDND RLDTLWIPNK
EYFWGLSKFL GTHWLMGNIL RLLFGSMTPP ANWNSPLRPG
EKYPLVVVFSH GLGAFRTLYS AIGIDLASHG FIVAAVEHRD
RSASATYYFK DQSAAEIGDK SWLYLRTLKQ EEETHIRNEQ
VRQRAKECSQ ALSLILDIDH GKPVKNALDL KFDMEQLKDS
IDREKIAVIG HSFGGATVIQ TLSEDQRFRC GIALDAWMPF
LGDEVYSRIP QPLFFINSEY FQYPANIIKM KKCYSPOKER
KMITIRGSVH QNFADTFAT GKIIGHMLKL KGDIDSNVAI
DLSENKASLAF LQKHLGLHKD FDQWDCLIEG DDENLIPGNT
INTTNQHIML QNSSGIEKYN
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### Database References

<b>Protein RefSeq:</b>	NP_002563.1
<b>Uniprot ID:</b>	P68402
<b>mRNA RefSeq:</b>	NM_002572.3

## Product Specifications

<b>Expressed in</b>	HEK 293 cells
<b>Purity</b>	> 95% by SDS-PAGE & HPLC analyses
<b>Endotoxin level</b>	< 0.1 ng/µg of protein (<1EU/µg).
<b>Formulation</b>	lyophilized
<b>Length (aa):</b>	420
<b>MW:</b>	47-55 kDa

**Stability:** The lyophilized protein is stable at room temperature for 1 month at 4°C and for 6 months and at -20 to -80°C. Reconstituted working aliquots are stable for 1 week at 2°C to 8°C and for 3 months at -20°C to -80°C.

**Reconstitution:** Centrifuge the vial prior to opening. Reconstitute in water to a concentration of 0.1-1.0 mg/ml. *Do not vortex.* This solution can be stored at 2-8°C for up to 1 week. For extended storage, it is recommended to further dilute in a buffer containing a carrier protein (example 0.1% BSA) and store in working aliquots at -20°C to -80°C.



**AVOID REPEATED FREEZE AND THAW CYCLES!**

**Biological Activity:** Measured by its ability to cleave a PAF analog in a chromogenic substrate linked assay. At a PAF-AH concentration of 10.0 µg/ml, 50% cleavage was achieved at an incubation time of approximately 2 minutes.