

## ENPP-2 Protein, Mouse (HEK293, His)

<b>Cat. No.:</b>	HY-P75733
<b>Synonyms:</b>	Ectonucleotide pyrophosphatase/phosphodiesterase family member 2; Autotaxin; LysoPLD; Npps2; Pdnp2
<b>Species:</b>	Mouse
<b>Source:</b>	HEK293
<b>Accession:</b>	Q9R1E6-1 (S49-I862)
<b>Gene ID:</b>	18606
<b>Molecular Weight:</b>	Approximately 100 kDa

### PROPERTIES

#### AA Sequence

S P W T N T S G S C	K G R C F E L Q E V	G P P D C R C D N L	C K S Y S S C C H D
F D E L C L K T A R	G W E C T K D R C G	E V R N E E N A C H	C S E D C L S R G D
C C T N Y Q V V C K	G E S H W V D D D C	E E I R V P E C P A	G F V R P P L I I F
S V D G F R A S Y M	K K G S K V M P N I	E K L R S C G T H A	P Y M R P V Y P T K
T F P N L Y T L A T	G L Y P E S H G I V	G N S M Y D P V F D	A T F H L R G R E K
F N H R W W G G Q P	L W I T A T K Q G V	R A G T F F W S V S	I P H E R R I L T I
L Q W L S L P D N E	R P S V Y A F Y S E	Q P D F S G H K Y G	P F G P E M T N P L
R E I D K T V G Q L	M D G L K Q L K L H	R C V N V I F V G D	H G M E D V T C D R
T E F L S N Y L T N	V D D I T L V P G T	L G R I R P K I P N	N L K Y D P K A I I
A N L T C K K P D Q	H F K P Y M K Q H L	P K R L H Y A N N R	R I E D L H L L V E
R R W H V A R K P L	D V Y K K P S G K C	F F Q G D H G F D N	K V N S M Q T V F V
G Y G P T F K Y R T	K V P P F E N I E L	Y N V M C D L L G L	K P A P N N G T H G
S L N H L L R T N T	F R P T L P E E V S	R P N Y P G I M Y L	Q S D F D L G C T C
D D K V E P K N K L	E E L N K R L H T K	G S T E E R H L L Y	G R P A V L Y R T S
Y D I L Y H T D F E	S G Y S E I F L M P	L W T S Y T I S K Q	A E V S S I P E H L
T N C V R P D V R V	S P G F S Q N C L A	Y K N D K Q M S Y G	F L F P P Y L S S S
P E A K Y D A F L V	T N M V P M Y P A F	K R V W T Y F Q R V	L V K K Y A S E R N
G V N V I S G P I F	D Y N Y N G L R D I	E D E I K Q Y V E G	S S I P V P T H Y Y
S I I T S C L D F T	Q P A D K C D G P L	S V S S F I L P H R	P D N D E S C N S S
E D E S K W V E E L	M K M H T A R V R D	I E H L T G L D F Y	R K T S R S Y S E I
L T L K T Y L H T Y	E S E I		

#### Appearance

Lyophilized powder

#### Formulation

Lyophilized from a 0.2 µm filtered solution of 20 mM Tris, 150 mM NaCl, pH 7.5.

#### Endotoxin Level

<1 EU/µg, determined by LAL method.

#### Reconstitution

It is not recommended to reconstitute to a concentration less than 100 µg/mL in ddH<sub>2</sub>O. For long term storage it is recommended to add a carrier protein (0.1% BSA, 5% HSA, 10% FBS or 5% Trehalose).

**Storage & Stability**

Stored at -20°C for 2 years. After reconstitution, it is stable at 4°C for 1 week or -20°C for longer (with carrier protein). It is recommended to freeze aliquots at -20°C or -80°C for extended storage.

**Shipping**

Room temperature in continental US; may vary elsewhere.

**DESCRIPTION****Background**

The ENPP-2 Protein hydrolyzes lysophospholipids, specifically lysophosphatidylcholine, to produce the signaling molecule lysophosphatidic acid (LPA) in extracellular fluids. It can also act on sphingosylphosphorylcholine, producing sphingosine-1-phosphate, which modulates cell motility. In addition, ENPP-2 Protein has been shown to hydrolyze bis-pNPP, pNP-TMP, and ATP to varying extents. It is involved in various motility-related processes, including angiogenesis and neurite outgrowth, and acts as an angiogenic factor by stimulating the migration of smooth muscle cells and microtubule formation. ENPP-2 Protein is also implicated in melanoma cell migration, potentially through a pertussis toxin-sensitive G protein. It may play a role in parturition induction, as well as in cell proliferation and adipose tissue development. Furthermore, it is required for LPA production in activated platelets and cleaves sn-1 lysophospholipids to generate sn-1 lysophosphatidic acids containing predominantly 18:2 and 20:4 fatty acids. ENPP-2 Protein exhibits a preference for the sn-1 isomer of 1-O-alkyl-sn-glycero-3-phosphocholine (lyso-PAF).

**Caution: Product has not been fully validated for medical applications. For research use only.**

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