



Daresbury Proteins

## Product description

Page | 1

**Name:** Recombinant Human Autotaxin, ATX (ENPP2)

**Synonyms:** Ectonucleotide Pyrophosphatase/Phosphodiesterase Family Member 2, ENPP2.

**Species:** Human

**Source:** HEK293

**Amino Acids:** 49-863

**Tag:** 10xHis at the C terminus.

**Predicted Molecular Weight:** 95 kDa

**Protein ID:** Q13822

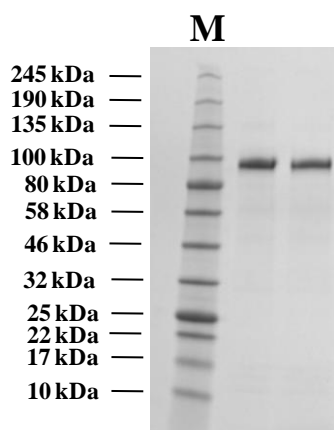
### **Sequence:**

DSPWNTNISGCKGRCFELQEAGPPDCRCNDNLCKSYTSCCHDFDELCLKTARGWECTKDRCGEVRNEENACHCSEDCLARGDCC  
 TNYQVVCKGESHVWDDDDCEEIKAAECPAGFVRPPLIIFSVDFGRASYMKGKSKVMPNIEKLRSCGTHSPYMRPVYPTKTFPNL  
 YTLATGLYPESHGIVGNSMYDPVFDATFHLRGREKFNHRWWGGQPLWITATKQGVKAGTFFWSVVI PHERRILTILQWLTLPD  
 HERPSVYAFYSEQPDFSGHKYGFPGPEMTNPLREIDKIVGQLMDGLKQLKLHRCVNVIFVGDHGMEDVTCDRTEFLSNYLTVN  
 DDITLVPGTGLGRIRSKFSNNAKYDPKAI IANLTCKKPDQHFKPYLKQHLPKRLHYANNRRIEDIHLLVERRWHVARKPLDVYK  
 KPSGKCFQGDHGFNDKVNMQTVFVGYGSTFKYKTKVPPFENIELYNVMCDLLGLKPAPNNGTHGSLNHLLRTNTFRPTMPE  
 EVTRPNYPGIMYLQSDFDLGCTCDDKVEPKNKLDELNKRHLTKGSTEERHLLYGRPAVLRYRTRYDILYHTDFESGYSEIFLMP  
 LWTSYTVSKQAEVSSVPDHLTSCVRPDVRVSPSFSQNCCLAYKNDKQMSYGFLFPPYLSSSPEAKYDAFLVTNMVPMYPAFKRV  
 WNYFQRLVVKKYASERNGVNVISGPIFDYDYDGLHDTEDKIKQYVEGSSIPVPTHYYSIITSCLDFTQPADKCDGPLSVSSFI  
 LPHRPDNEESCNSSEDESKWVEELMKMHTARVRDIEHLTSLDFFRKTSRSYPEILTLKTYLHTYSEIIGSGHHHHHHHHHHH

## Product specifications

**Estimated Molecular Weight, SDS-PAGE:** ≈96 kDa

**Grade & Purity:** >90% as estimated by SDS-PAGE stained with Instant Blue Stain (Expedeon).



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M – Protein size marker

**Endotoxins:** Less than 0.1 ng/μg (1 IEU/μg), as measured by LAL method.

**Formulation:** PBS 20% Glycerol

## **Shipping**

Product is shipped with cool packs. Upon receipt, store at -20°C to -70°C.

## **Product application and Storage**

**Storage:** The protein should be stored at -20°C to -70°C preferably in small aliquots to avoid repeated freeze-thaw cycles.

**Stability:** At least 12 months at -20°C to -70°C and at least 1 month at 2°C to 8°C.

**Application Note:** For research purposes only. Not for use in humans.

## **Background Information**

This protein hydrolyzes lysophospholipids to produce the signaling molecule lysophosphatidic acid (LPA) in extracellular fluids (1,2). Major substrate is lysophosphatidylcholine (3). Also can act on sphingosylphosphorylcholine producing sphingosine-1-phosphate, a modulator of cell motility. Involved in several motility-related processes such as angiogenesis and neurite outgrowth. Acts as an angiogenic factor by stimulating migration of smooth muscle cells and microtubule formation (4). Stimulates migration of melanoma cells, probably via a pertussis toxin-sensitive G protein (5). May have a role in induction of parturition. Tumor cell motility-stimulating factor.

### **References:**

1. Van Meeteren et al. (2005) *J. Biol. Chem.*, 21155-21161
2. Stein et al. (2015) *Mol. Pharmacol.*, 982-992
3. Tokumura et al. (2002) *J. Biol. Chem.*, 39436-39442
4. Nam et al. (2001) *Cancer Res.*, 6938-6944
5. Stracke et al. (1992) *J. Biol. Chem.*, 2524-2529