

# Cytokines

## Human Recombinant Autotaxin

Autotaxin, His tag



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Catalog #100-1324

50 µg

## Product Description

Autotaxin, also known as ENPP2, is a secreted glycoprotein belonging to the ectonucleotide pyrophosphatase/phosphodiesterase (ENPP) family. Autotaxin contains two N-terminal somatomedin B (SMB)-like domains, a central phosphodiesterase (PDE) domain with an active catalytic site, and a C-terminal nuclease-like (NUC) domain (Nishimasu et al.). It contains a His-residue tag at the amino end of the polypeptide chain. It catalyzes the production of lysophosphatidic acid (LPA) from lysophospholipids in extracellular fluids. LPA is a potent mitogen which can evoke growth factor-like responses (Moolenaar and Corven). Dysregulation of autotaxin and LPA receptors is involved in cancer (Tigyi et al.), fibrosis (Ninou et al.), neurological disorders (Roy et al.), and other inflammation-associated conditions. Autotaxin and LPA are overexpressed in many cancers and can promote cell proliferation, migration, and resistance to apoptotic death (Tigyi et al.). Autotaxin was also found to catalyze the production of cyclic phosphatidic acid (CPA), an analog of LPA, which has anti-mitogenic and inhibitory effects on tumor cell invasion and metastasis (Fujiwara).

## Product Information

Alternative Names:	ATX, ATX-X, ENPP2, LysoPLD, NPP2, PD-IALPHA, PDNP2
Accession Number:	AAH34961.1 (Asp49-Ile863) was expressed with a polyhistidine tag and spacer sequence (LEVLFQGP) at the N-terminus.
Amino Acid Sequence:	MHHHHHHHHH HLEVLFGQPD SPWTNISGSC KGRFCFELQEA GPPDCRCNDL CKSYTSCCHD FDELCLKTAR GWECTKDRCG EVRNEENACH CSEDCLARGD CCTNYQVCK GESHWVDDDC EEIKAAECPA GFVRPPLIIF SVDGFRASYM KKGSKVMPNI EKLRSCTGHS PYMRPVYPTK TFPNLYTLAT GLYPESHGIV GNSMYDPVFD ATFHLRGREK FNHRWWGGQP LWITATKQGV KAGTFFWSV IPHERRILTI LQWLTPDHE RPSVYAFYSE QPDFSGHKYG PFGPEMTNP LREIDKIVGQ LMDGLKQLKL HRCVNVIFVGD HGMEDVTCDR TEFLSNLYTN VDDITLVPQT LGRIIRSKFSN NAKYDPKAI ANLTCKKPDQ HFKPYLKQHL PKRLHYANNR RIEDIHLLE RRWHVARKPL DVYKKPSGKC FFQGDHGFND KVNMQTVFV GYGPTFKYKT KVPPFENIEL YNVMCDLLGL KPAPNNGTHG SLNHLLRTNT FRPTMPEEVT RPNYPGIMYL QSDFDLGCTC DDKVEPKNKL DELNKRHLTK GSTEERHLLY GRPAVLYRTR YDILYHTDFE SGYSEIFLMP LWTSYTVSKQ AEVSSVPDHL TSCVRPDVRV SPSFSQNCLA YKNDKQMSYG FLPPYLSSS PEAKYDAFLV TNMVPMPAF KRVWNYFQRV LVKKYALERN GVNVISGPIF DYDYDGLHDT EDKIKQYVEG SSIPVPTHYY SIITSCLDFT QPADKCDGPL SVSSFILPHR PDNEESCNSSE DESKWVEEL MKMHTARVRD IEHLTSLDFF RKTSSRYPEI LTLKTYLHTY ESEI
Predicted Molecular Mass:	96 kDa
Species:	Human
Formulation:	Lyophilized from sterile PBS, pH 7.4. Trehalose (5%), mannitol (5%), and 0.01% TWEEN® 80 are normally added as protectants before lyophilization.
Source:	HEK293 cells

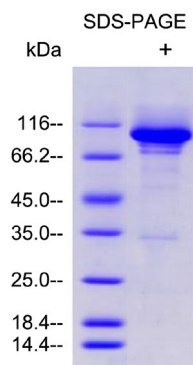
## Specifications

Activity:	Not available
Purity:	≥ 85%
Endotoxin Level:	Measured by kinetic Limulus amoebocyte lysate (LAL) analysis and is ≤ 1 EU/µg protein.

## Preparation and Storage

Storage:	Store at -20 to -80°C.
Stability:	Stable as supplied for 12 months from date of receipt.
Preparation:	Centrifuge vial before opening. Reconstitute the product in sterile water to at least 0.25 mg/mL by pipetting the solution down the sides of the vial. Do not vortex. As a general guide, do not store at 2 - 8°C for more than 1 month or at -80°C for more than 3 months. Avoid repeated freeze-thaw cycles.

## Data



Human Recombinant Autotaxin was resolved with SDS-PAGE under reducing (+) conditions and visualized by Coomassie Blue staining. Human Recombinant Autotaxin has a predicted molecular mass of 96 kDa.

## Related Products

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## References

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