## Recombinant Human Autotaxin/ENPP2 Protein (aa 49-863, His Tag)

Catalog No. PKSH031157

Note: Centrifuge before opening to ensure complete recovery of vial contents.

Description	
Synonyms	ATX;ATXFLJ26803;ATX-X;Autotaxin;autotaxin-t;EC 3.1.4.39;ectonucleotide pyrophosphatase/phosphodiesterase 2;E-NPP 2;ENPP2;LysoPLD;NPP2;PD- IALPHA;PDNP2;PDNP2NPP2
Species	Human
Expression Host	HEK293 Cells
Sequence	Asp 49-Ile 863
Accession	AAH34961.1
Calculated Molecular Weight	96.0 kDa
Observed molecular weight	120-130 kDa
Tag	N-His
Bioactivity	Not validated for activity
Properties	
Purity	> 88 % as determined by reducing SDS-PAGE.
Endotoxin	< 1.0 EU per $\mu$ g of the protein as determined by the LAL method.
Storage	Generally, lyophilized proteins are stable for up to 12 months when stored at -20 to -80°C. Reconstituted protein solution can be stored at 4-8°C for 2-7 days. Aliquots of reconstituted samples are stable at < -20°C for 3 months.
Shipping	This product is provided as lyophilized powder which is shipped with ice packs.
Formulation	Lyophilized from sterile PBS, pH 7.4 Normally 5 % - 8 % trehalose, mannitol and 0.01% Tween80 are added as protectants before lyophilization. Please refer to the specific buffer information in the printed manual.
Reconstitution	Please refer to the printed manual for detailed information.
Data	



> 88 % as determined by reducing SDS-PAGE.

## Background

## **For Research Use Only**

## **Elabscience**®

ENPP2 (Ectonucleotide pyrophosphatase/phosphodiesterase family member 2), also referred as Autotaxin, is a secreted enzyme encoded by the ENPP2 gene. This gene product stimulates the motility of tumor cells, has angiogenic properties, and its expression is upregulated in several kinds of carcinomas. The Autotaxin protein is important for generating the lipid signaling molecule lysophosphatidic acid (LPA), which is a potent mitogen, which facilitates cell proliferation and migration, neurite retraction, platelet aggregation, smooth muscle contraction, actin stress formation and cytokine and chemokine secretion. ATX has been found to catalyze the formation of cyclic phosphatidic acid (cPA), which have antitumor role by antimitogenic regulation of cell cycle, inhibition of cancer invasion and metastasis. LPA receptors and ATX are upregulated in numerous cancer cell types and show expression patterns that correlate with tumor cell invasiveness. Thus, Autotaxin has recently emerged as an attractive target for the development of anti-cancer chemotherapeutics. In addition, Serum ATX activity was found to be enhanced in relation to hepatic fibrosis in chronic liver disease due to hepatitis virus C infection.