## Recombinant Mouse Autotaxin/ENPP2 Protein (His Tag)

#### Catalog No. PKSM040556

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

Description		
Synonyms	ATX;E-NPP 2;lysoPLD;Npps2;PD-Ialpha;Pdnp2	
Species	Mouse	
Expression Host	HEK293 Cells	
Sequence	Ser 49-Ile 862	
Accession	Q9R1E6-1	
Calculated Molecular Weight	96.0 kDa	
Observed molecular weight	55-75 kDa	
Tag	N-His	
Bioactivity	Not validated for activity	
Properties		
Purity	> 93 % 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 20mM Tris, 150mM NaCl, 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

KDa	MK	R
116 66.2	-	-
45.0 35.0	-	
25.0	-	
18.4 14.4	=	

> 93 % as determined by reducing SDS-PAGE.

## Background

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,

### **For Research Use Only**

Toll-free: 1-888-852-8623 Web: <u>www.elabscience.com</u> Tel: 1-832-243-6086 Email: <u>techsupport@elabscience.com</u>

# **Elabscience**®

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.

For Research Use Only