



## Recombinant Protein Technical Manual

**Recombinant Human Autotaxin/ENPP2 Protein (aa 49-863, His Tag)**  
RPES1521

### Product Data:

**Product SKU:** RPES1521

**Size:** 10µg

**Species:** Human

**Expression host:** HEK293 Cells

**Uniprot:** AAH34961.1

### Protein Information:

**Molecular Mass:** 96 kDa

**AP Molecular Mass:** 12030 kDa

**Tag:** N-His

**Bio-activity:**

**Purity:** > 88 % as determined by reducing SDS-PAGE.

**Endotoxin:** < 1.0 EU per µg as determined by the LAL method.

**Storage:** 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

**Reconstitution:** Please refer to the printed manual for detailed information.

**Application:**

**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

## Immunogen Information:

**Sequence:** Asp 49-Ile 863

## 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, 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.