

42771 Recombinant Mouse Autotaxin (ATX)

Source:	Expressed in Human Embryonic Kidney 293 Cells
Tag:	C-terminal 6xHis
Size:	100µg
Purity:	>95%, determined by SDS-PAGE
Endotoxin Level:	<0.2EU/µg, determined by LAL Test
Other Names:	ENPP2, PDNP2

Introduction to the Molecule

Autotaxin (ATX) also known as ENPP2 (ectonucleotide pyrophosphatase/phosphodiesterase 2), is a secreted glycoprotein which belongs to the ectonucleotide pyrophosphatase/phosphodiesterase (NPP) family. Autotaxin exhibits unique lysophospholipase D activity which allows formation of lysophosphatidic acids (LPA) and choline from lysophosphatidylcholine. ATX is overexpressed in many types of tumor cells and plays an important role in tumor development and metastasis.

Amino Acid Sequence

AEWDEGPPTVLSDSPWTNTSGSCKGRFCFELQEVG
PPDCRCDNLCKSYSSCCHDFDELCLKTARGWECTK
DRCGEVRNEENACHCSEDCLSRGDCCTNYQVVCK
GESHVWDDDCCEEIRVPECPAGFVRPPLIIFSVDGFR
ASYMKGSKVMPNIEKLRSCGTHAPYMRPVYPTKT
FPNLYTLATGLYPESHGIVGNSMYDPVFDATFHRLG
REKFNHRWWGGQPLWITATKQGVRAAGTFWVSVSI
PHERRILTILQWLSLPDNERPSVYAFYSEQPDFSGH
KYGPFPGPEMTNPLREIDKTVGQLMDGLKQLKLRHC
VNVIFVGDHGMEDVTCRTEFLSNYLTVDDITLVP
GTLGRIRPKIPNNLKYDPKAIIANLTCCKPDQHFQPY
MKQHLPKRLHYANNRRIEDLHLLVERRWHVARKPL
DVYKKPSGKCFQGDHGFNDKVNMQTVFVGYGP
TFKYRTKVPPFENIELYNVMCDLLGLKPAPNNGTHG
SLNHLLRTNTFRPTLPEEVSRLPNYPGIMYLSDFDL
GCTCDDKVEPKNKLEELNKRLHTKGSTEERHLLYG
RPAVLYRTSYDILYHTDFESGYSEIFLMPLWTSYTIS
KQAEVSSIPEHLTNCVRPDVRVSPGFSQNCCLAYKN
DKQMSYGFLFPPYLSSSPEAKYDAFLVTNMVPMYPA
FKRVWYTFQRVLVKKYASERNGVNVISGPIFDYNY
NGLRDIEDEIKQYVEGSSIPVPTHYYSIITSCLDFTQ
PADKCDGPLSVSSFILPHRPDNDESCNSSEDESKW

VEELMKMHTARVRDIEHLTGLDFYRKTSRSYSEILT
LKTYLHTYESEISYYHHHHHH

Note: 6xhis tag is highlighted

Formulation, Reconstitution and Storage

- Lyophilized at 1 mg/mL in NaCl 137mM, KCl 2.7mM, Na₂HPO₄ 10mM, KH₂PO₄ 1.8mM, pH 8.0.
- Add deionized water to prepare a working stock solution of approximately 1 mg/mL and let the lyophilized pellet dissolve completely.
- Store lyophilized protein at -20°C. Aliquot reconstituted protein and store at -80°C. Avoid repeated freezing/thawing cycles.

Bioactivity Test

The specific activity of mouse ATX, measured by enzymatic ability to cleave Bis (p-Nitrophenyl) Phosphate (BNPP) is > 5,000 pmol/min/µg.

SDS-PAGE Gel

