# Autotaxin (H-180): sc-66813



The Power to Question

## **BACKGROUND**

Autotaxin (ATX), also designated ectonucleotide pyrophosphatase/phosphodiesterase 2 (E-NPP 2), is a membrane-bound glycoprotein that cleaves diester bonds for a broad range of substrates. Originally isolated from the human melanoma cell line (A2058), Autotaxin is predominantly expressed in brain, placenta, ovary and small intestine. Autotaxin has significant homology to the cell membrane differentiation antigen PC-1, and is a stimulator of tumor cell motility. It also functions as a catalyst by hydrollytically removing 5'-nucleotides from the 3'-hydroxy termini of 3'-hydroxy-terminated oligonucleotides.

## **REFERENCES**

- Murata, J., et al. 1994. cDNA cloning of the human tumor motilitystimulating protein, Autotaxin, reveals a homology with phosphodiesterases. J. Biol. Chem. 269: 30479-30484.
- 2. Kawagoe, H., et al. 1995. Molecular cloning and chromosomal assignment of the human brain-type phosphodiesterase I/nucleotide pyrophosphatase gene (PDNP2). Genomics 30: 380-384.

#### CHROMOSOMAL LOCATION

Genetic locus: ENPP2 (human) mapping to 8q24.12; Enpp2 (mouse) mapping to 15 D1.

## **SOURCE**

Autotaxin (H-180) is a rabbit polyclonal antibody raised against amino acids 541-720 mapping within a C-terminal extracellular domain of Autotaxin of human origin.

# **PRODUCT**

Each vial contains 200  $\mu g$  lgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

# **APPLICATIONS**

Autotaxin (H-180) is recommended for detection of Autotaxin of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2  $\mu$ g per 100-500  $\mu$ g of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Autotaxin (H-180) is also recommended for detection of Autotaxin in additional species, including equine, canine and porcine.

Suitable for use as control antibody for Autotaxin siRNA (h): sc-44906, Autotaxin siRNA (m): sc-44907, Autotaxin shRNA Plasmid (h): sc-44906-SH, Autotaxin shRNA Plasmid (m): sc-44907-SH, Autotaxin shRNA (h) Lentiviral Particles: sc-44906-V and Autotaxin shRNA (m) Lentiviral Particles: sc-44907-V.

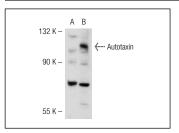
Molecular Weight of Autotaxin: 125 kDa.

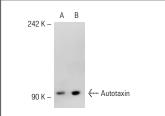
Positive Controls: Autotaxin (m): 293T Lysate: sc-118641 or Autotaxin (h2): 293T Lysate: sc-170647.

#### **RECOMMENDED SECONDARY REAGENTS**

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use goat anti-rabbit IgG-HRP: sc-2004 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible goat anti-rabbit IgG-HRP: sc-2030 (dilution range: 1:2000-1:5000), Cruz Marker™ Molecular Weight Standards: sc-2035, TBS Blotto A Blocking Reagent: sc-2333 and Western Blotting Luminol Reagent: sc-2048. 2) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) Immunofluorescence: use goat anti-rabbit IgG-FITC: sc-2012 (dilution range: 1:100-1:400) or goat anti-rabbit IgG-TR: sc-2780 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

## **DATA**





Autotaxin (H-180): sc-66813. Western blot analysis of Autotaxin expression in non-transfected: sc-117752 (A) and mouse Autotaxin transfected: sc-118641 (B) 293T whole cell Ivsates.

Autotaxin (H-180): sc-66813. Western blot analysis of Autotaxin expression in non-transfected: sc-117752 (A) and human Autotaxin transfected: sc-170647 (B) 2931 whole cell lysates.

# **SELECT PRODUCT CITATIONS**

1. Kadekar, S., et al. 2012. Exocrine pancreatic carcinogenesis and autotaxin expression. PLoS ONE 7: e43209.

## **STORAGE**

Store at 4° C, \*\*DO NOT FREEZE\*\*. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

# **RESEARCH USE**

For research use only, not for use in diagnostic procedures.

## **PROTOCOLS**

See our web site at www.scbt.com or our catalog for detailed protocols and support products.



Try **Autotaxin (E-12): sc-374222**, our highly recommended monoclonal alternative to Autotaxin (H-180).

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