Autotaxin (E-12): sc-374222

**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 hydrolitically removing 5'-nucleotides from the 3'-hydroxy termini of 3'-hydroxy-terminated oligonucleotides.

**CHROMOSOMAL LOCATION**

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

**SOURCE**

Autotaxin (E-12) is a mouse monoclonal antibody raised against amino acids 541-720 mapping within a C-terminal extracellular domain of Autotaxin of human origin.

**PRODUCT**

Each vial contains 200 µg IgG kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Autotaxin (E-12) is available conjugated to agarose (sc-374222 AC), 500 µg/0.25 ml agarose in 1 ml, for IP; to HRP (sc-374222 HRP), 200 µg/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-374222 PE), fluorescein (sc-374222 FITC), Alexa Fluor® 488 (sc-374222 AF488), Alexa Fluor® 546 (sc-374222 AF546), Alexa Fluor® 594 (sc-374222 AF594) or Alexa Fluor® 647 (sc-374222 AF647), 200 µg/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor® 680 (sc-374222 AF680) or Alexa Fluor® 790 (sc-374222 AF790), 200 µg/ml, for Near-Infrared (NIR) WB, IF and FCM.

**STORAGE**

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

**APPLICATIONS**

Autotaxin (E-12) is recommended for detection of Autotaxin of mouse, rat and human origin by Western Blotting (starting dilution 1:100, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg 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).

Suitable for use as control antibody for Autotaxin siRNA (h): sc-44906, Autotaxin siRNA (m): sc-44907, Autotaxin shRNA Plasmid (h): sc-44908-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: human ovary extract: sc-363769 or human brain extract: sc-364375.

**RECOMMENDED SUPPORT REAGENTS**

To ensure optimal results, the following support reagents are recommended:

1) Western Blotting: use m-IgGk BP-HRP: sc-516102 or m-IgGk BP-HRP (Cruz Marker); sc-516102-CM (dilution range: 1:1000-1:10000), Cruz Marker™ Molecular Weight Standards: sc-2035, UltraCruz® Blocking Reagent: sc-516214 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 m-IgGk BP-FITC: sc-516140 or m-IgGk BP-PE: sc-516141 (dilution range: 1:50-1:200) with UltraCruz® Mounting Medium: sc-24941 or UltraCruz® Hard-set Mounting Medium: sc-359850.

**DATA**

![Western blot analysis of Autotaxin expression in human ovary tissue extract](image1)

![Western blot analysis of Autotaxin expression in human brain tissue extract](image2)

**SELECT PRODUCT CITATIONS**