

Aminopeptidase P3 (A-4): sc-398497

BACKGROUND

Aminopeptidases comprise a family of enzymatic proteins that are widely distributed in both eukaryotes and prokaryotes and function to catalyze the removal of amino acids from the N-termini of proteins. Aminopeptidase P3, also known as APP3 or XPNPEP3, is a 507 amino acid protein that belongs to the aminopeptidase family. Expressed throughout the body, Aminopeptidase P3 uses manganese as a cofactor to catalyze the release of any proline-linked N-terminal amino acid, including those that exist in di- or tripeptides. Aminopeptidase P3 exists as three alternatively spliced isoforms which are encoded by a gene that maps to chromosome 22. Chromosome 22 houses over 500 genes, some of which are involved in Phelan-McDermid syndrome, schizophrenia and Neurofibromatosis type 2.

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CHROMOSOMAL LOCATION

Genetic locus: XPNPEP3 (human) mapping to 22q13.2.

SOURCE

Aminopeptidase P3 (A-4) is a mouse monoclonal antibody raised against amino acids 153-333 mapping within an internal region of Aminopeptidase P3 of human origin.

RESEARCH USE

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

PRODUCT

Each vial contains 200 μ g IgG₁ kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

APPLICATIONS

Aminopeptidase P3 (A-4) is recommended for detection of Aminopeptidase P3 of human origin by Western Blotting (starting dilution 1:100, dilution range 1:100-1:1000), immunoprecipitation [1-2 μ g per 100-500 μ 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).

Suitable for use as control antibody for Aminopeptidase P3 siRNA (h): sc-105061, Aminopeptidase P3 shRNA Plasmid (h): sc-105061-SH and Aminopeptidase P3 shRNA (h) Lentiviral Particles: sc-105061-V.

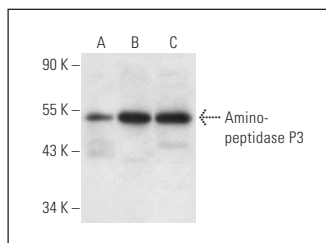
Molecular Weight of Aminopeptidase P3: 57 kDa.

Positive Controls: A549 cell lysate: sc-2413, Jurkat whole cell lysate: sc-2204 or HeLa whole cell lysate: sc-2200.

RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended: 1) Western Blotting: use m-IgG κ BP-HRP: sc-516102 or m-IgG κ 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-IgG κ BP-FITC: sc-516140 or m-IgG κ 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



Aminopeptidase P3 (A-4): sc-398497. Western blot analysis of Aminopeptidase P3 expression in A549 (A), Jurkat (B) and HeLa (C) whole cell lysates.

STORAGE

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

PROTOCOLS

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