**Background**

DNPEP, also known as DAP, ASPEP or aspartyl aminopeptidase, is a 475 amino acid protein that is a member of the M18 family of the MH clan of co-catalytic metallopeptidases. It contains three zinc finger binding domains and several conserved residues including three histidines, three glutamates and five aspartates. DNPEP is ubiquitously expressed with highest expression in testis, intermediate expression in kidney and lung, and lesser but significant expression in spleen, liver and brain. DNPEP removes glutamyl or aspartyl residues from N-terminal acidic amino acid-containing peptides, implicating its importance in intracellular protein and peptide metabolism. In the brain, DNPEP converts Angiotensin I to Angiotensin II and is thought to play an important role in blood pressure control. This suggests that DNPEP may function as a potential target for antihypertensive therapy.

**References**


**Chromosomal Location**

Genetic locus: DNPEP (human) mapping to 2q35.

**Source**

DNPEP (Q-16) is a mouse monoclonal antibody raised against recombinant DNPEP of human origin.

**Product**

Each vial contains 50 µg IgG1 in 500 µl of PBS with < 0.1% sodium azide and 0.1% gelatin.

**Applications**

DNPEP (Q-16) is recommended for detection of DNPEP of human origin by Western Blotting (starting dilution 1:200, 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 DNPEP siRNA (h): sc-95014, DNPEP siRNA (m): sc-143127, DNPEP shRNA Plasmid (h): sc-95014-SH, DNPEP shRNA Plasmid (m): sc-143127-SH, DNPEP shRNA (h) Lentiviral Particles: sc-95014-V and DNPEP shRNA (m) LentiviralParticles: sc-143127-V.

Molecular Weight of DNPEP: 55 kDa.

**Recommended Secondary Reagents**

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use goat anti-mouse IgG-HRP: sc-2005 (dilution range: 1:2000-1:32,000) or Cruz Marker™ compatible goat anti-mouse IgG-HRP: sc-2031 (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-2035 (0.5 ml agarose/2.0 ml). 3) Immunofluorescence: use goat anti-mouse IgG-FITC: sc-2005 (1:2000-1:5000), Cruz Marker™ compatible goat anti-mouse IgG-FITC: sc-2035 (1:5000) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

**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.