

# DPEP3 (S-13): sc-164221

## BACKGROUND

DPEP3 (dipeptidase 3), also known as MBD3 (membrane-bound dipeptidase 3), is a 488 amino acid protein that belongs to the peptidase M19 family and is thought to function as a metalloprotease. A membrane protein expressed in testis, DPEP3 exists as a disulfide-linked homodimer and may be involved in meiosis. DPEP3 binds zinc as a cofactor, is inhibited by L-penicillamine and is encoded by a gene that maps to human chromosome 16q22.1. Chromosome 16 encodes over 900 genes and comprises nearly 3% of the human genome. The GAN gene is located on chromosome 16 and, with mutation, may lead to giant axonal neuropathy, a nervous system disorder characterized by increasing malfunction with growth. The rare disorder Rubinstein-Taybi syndrome is also associated with chromosome 16, as is Crohn's disease, which is a gastrointestinal inflammatory condition.

## REFERENCES

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## CHROMOSOMAL LOCATION

Genetic locus: Dpep3 (mouse) mapping to 8 D3.

## SOURCE

DPEP3 (S-13) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of DPEP3 of mouse origin.

## PRODUCT

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

Blocking peptide available for competition studies, sc-164221 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

## APPLICATIONS

DPEP3 (S-13) is recommended for detection of DPEP3 of mouse and rat origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), 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); non cross-reactive with DPEP1 or DPEP2.

Suitable for use as control antibody for DPEP3 siRNA (m): sc-143154, DPEP3 shRNA Plasmid (m): sc-143154-SH and DPEP3 shRNA (m) Lentiviral Particles: sc-143154-V.

Molecular Weight of DPEP3: 54 kDa.

## RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use donkey anti-goat IgG-HRP: sc-2020 (dilution range: 1:2000-1:100,000) or Cruz Marker<sup>™</sup> compatible donkey anti-goat IgG-HRP: sc-2033 (dilution range: 1:2000-1:5000), Cruz Marker<sup>™</sup> Molecular Weight Standards: sc-2035, TBS Blotto A Blocking Reagent: sc-2333 and Western Blotting Luminol Reagent: sc-2048. 2) Immunofluorescence: use donkey anti-goat IgG-FITC: sc-2024 (dilution range: 1:100-1:400) or donkey anti-goat IgG-TR: sc-2783 (dilution range: 1:100-1:400) with UltraCruz<sup>™</sup> Mounting Medium: sc-24941.

## 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](http://www.scbt.com) or our catalog for detailed protocols and support products.