

DPP7 (B-7): sc-514833

BACKGROUND

Dipeptidyl peptidases (DPPs) mediate regulatory activity of their substrates and have been linked to a variety of diseases including type 2 diabetes, obesity and cancer. DPPs have post-proline dipeptidyl aminopeptidase activity, cleaving Xaa-Pro dipeptides from the N-termini of proteins. DPPs can bind specific voltage-gated potassium channels and alter their expression and biophysical properties and may also influence T cells. DPP proteins include DPRP1, DPRP2, DPP3, DPP7, DPP10, DPPX and CD26. DPP7 (dipeptidyl-peptidase 7), also known as DPP2, DPP11 or QPP (quiescent cell proline dipeptidase), is expressed in quiescent lymphocytes and localizes to lysosomes. In response to calcium release, DPP7 can be secreted in its active form. DPP7 exists as a homodimer via its leucine zipper motif and is involved in the degradation of oligopeptides. DPP7 is essential for lymphocyte survival, as the inhibition of DPP7 results in quiescent cell apoptosis.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: Dpp7 (mouse) mapping to 2 A3.

SOURCE

DPP7 (B-7) is a mouse monoclonal antibody specific for an epitope mapping between amino acids 382-401 within an internal region of DPP7 of mouse origin.

PRODUCT

Each vial contains 200 µg IgG_{2a} kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

APPLICATIONS

DPP7 (B-7) is recommended for detection of DPP7 of mouse and rat 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 DPP7 siRNA (m): sc-62233, DPP7 shRNA Plasmid (m): sc-62233-SH and DPP7 shRNA (m) Lentiviral Particles: sc-62233-V.

Molecular Weight (predicted) of DPP7: 54 kDa.

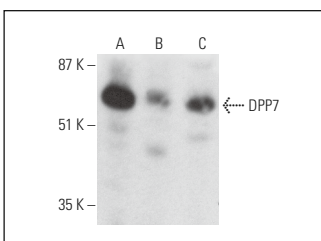
Molecular Weight (observed) of DPP7: 50 kDa.

Positive Controls: RAW 264.7 whole cell lysate: sc-2211, mouse kidney extract: sc-2255 or BYDP whole cell lysate: sc-364368.

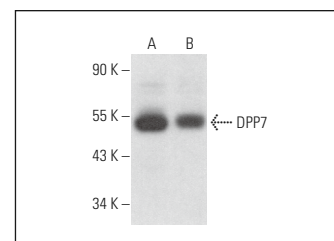
RECOMMENDED SUPPORT REAGENTS

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



DPP7 (B-7): sc-514833. Western blot analysis of DPP7 expression in mouse kidney (A), mouse skeletal muscle (B) and mouse bone marrow (C) tissue extracts.



DPP7 (B-7): sc-514833. Western blot analysis of DPP7 expression in RAW 264.7 (A) and BYDP (B) 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.

RESEARCH USE

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