SANTA CRUZ BIOTECHNOLOGY, INC.

DPP7 (H-8): sc-390008

SANTA CRUZ BIOTECHNOLOGY

The Power to Question

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, DPPII 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 (human) mapping to 9q34.3.

SOURCE

DPP7 (H-8) is a mouse monoclonal antibody specific for an epitope mapping between amino acids 28-57 at the N-terminus of DPP7 of human origin.

STORAGE

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

PRODUCT

Each vial contains 200 µg IgG_1 in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

DPP7 (H-8) is available conjugated to agarose (sc-390008 AC), 500 µg/ 0.25 ml agarose in 1 ml, for IP; to HRP (sc-390008 HRP), 200 µg/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-390008 PE), fluorescein (sc-390008 FITC), Alexa Fluor® 488 (sc-390008 AF488), Alexa Fluor® 546 (sc-390008 AF546), Alexa Fluor® 594 (sc-390008 AF594) or Alexa Fluor® 647 (sc-390008 AF647), 200 µg/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor® 680 (sc-390008 AF680) or Alexa Fluor® 790 (sc-390008 AF790), 200 µg/ml, for Near-Infrared (NIR) WB, IF and FCM.

Blocking peptide available for competition studies, sc-390008 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% stabilizer protein).

APPLICATIONS

DPP7 (H-8) is recommended for detection of DPP7 of 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).

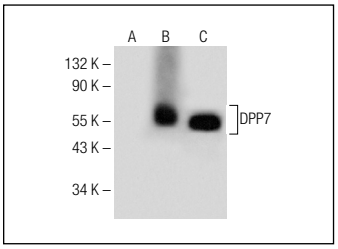
Suitable for use as control antibody for DPP7 siRNA (h): sc-62232, DPP7 shRNA Plasmid (h): sc-62232-SH and DPP7 shRNA (h) Lentiviral Particles: sc-62232-V.

Molecular Weight (predicted) of DPP7: 54 kDa.

Molecular Weight (observed) of DPP7: 50 kDa.

Positive Controls: DPP7 (h): 293 Lysate: sc-112766 or HeLa whole cell lysate: sc-2200.

DATA



DPP7 (H-8): sc-390008. Western blot analysis of DPP7 expression in non-transfected 293: sc-110760 (**A**), human DPP7 transfected 293: sc-112766 (**B**) and HeLa (**C**) whole cell lysates.

RESEARCH USE

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