SANTA CRUZ BIOTECHNOLOGY, INC.

DPP7 (E-20): sc-55171

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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STORAGE

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

CHROMOSOMAL LOCATION

Genetic locus: Dpp7 (rat) mapping to 3p13.

SOURCE

DPP7 (E-20) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of DPP7 of rat 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-55171 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

DPP7 (E-20) is recommended for detection of DPP7 of rat 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).

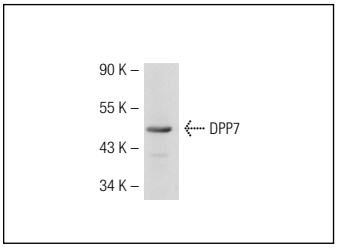
DPP7 (E-20) is also recommended for detection of DPP7 in additional species, including canine and bovine.

Molecular Weight of DPP7 (predicted): 54 kDa.

Molecular Weight of DPP7 (observed): 50 kDa.

Positive Controls: rat kidney extract: sc-2394.

DATA



DPP7 (E-20): sc-55171. Western blot analysis of DPP7 expression in rat kidney tissue extract.

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.