SANTA CRUZ BIOTECHNOLOGY, INC.

DPRP2 (H-54): sc-68350

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. DPRP2 (dipeptidyl-peptidase IV-related protein 2), also known as DPP9 (dipeptidyl-peptidase 9) or DP9, is a member of the peptidase S9B family of proteins that exhibit prolyl-oligopeptidase activity. DPRP2 localizes to the cytoplasm and is ubiquitously expressed with predominant expression in heart, muscle and liver. DPRP2 may play an important role in the regulation of signaling by peptide hormones.

REFERENCES

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4. Ajami, K., et al. 2004. Dipeptidyl peptidase 9 has two forms, a broad tissue distribution, cytoplasmic localization and DPIV-like peptidase activity. Biochim. Biophys. Acta 1679: 18-28.
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7. Maes, M.B., et al. 2007. Dipeptidyl peptidase II (DPPII), a review. Clin. Chim. Acta 380: 31-49.
8. Kang, N.S., et al. 2007. Docking-based 3D-QSAR study for selectivity of DPP4, DPP8, and DPP9 inhibitors. Bioorg. Med. Chem. Lett. 17: 3716-3721.
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CHROMOSOMAL LOCATION

Genetic locus: DPP9 (human) mapping to 19p13.3; Dpp9 (mouse) mapping to 17 D.

SOURCE

DPRP2 (H-54) is a rabbit polyclonal antibody raised against amino acids 285-338 mapping within an internal region of DPRP2 of human origin.

PRODUCT

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

APPLICATIONS

DPRP2 (H-54) is recommended for detection of DPRP2 of mouse, rat and 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).

DPRP2 (H-54) is also recommended for detection of DPRP2 in additional species, including equine, canine, bovine and avian.

Suitable for use as control antibody for DPRP2 siRNA (h): sc-62236, DPRP2 siRNA (m): sc-62237, DPRP2 shRNA Plasmid (h): sc-62236-SH, DPRP2 shRNA Plasmid (m): sc-62237-SH, DPRP2 shRNA (h) Lentiviral Particles: sc-62236-V and DPRP2 shRNA (m) Lentiviral Particles: sc-62237-V.

Molecular Weight of DPRP2: 98 kDa.

RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use goat anti-rabbit IgG-HRP: sc-2004 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible goat anti-rabbit IgG-HRP: sc-2030 (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-2003 (0.5 ml agarose/2.0 ml). 3) Immunofluorescence: use goat anti-rabbit IgG-FITC: sc-2012 (dilution range: 1:100-1:400) or goat anti-rabbit IgG-TR: sc-2780 (dilution range: 1:100-1:400) with UltraCruz™ 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 or our catalog for detailed protocols and support products.

MONOS Satisfaction Guaranteed

Try **DPRP2 (F-1): sc-271634**, our highly recommended monoclonal alternative to DPRP2 (H-54).