

DPPX (E-20): sc-46923

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 (dipeptidyl-peptidase 8, DPP8, MSTP141), DPRP2 (dipeptidyl-peptidase 9, DPP9), DPP3 (DPPIII), DPRP3 (dipeptidyl-peptidase 10, DPP10, DPL2, DPPY, DPRP3), DPP6 (DPPX), DPP4 (adenosine deaminase complexing protein-2, T cell activation antigen CD26) and DPP7 (DPP2, QPP). DPPX, which can bind to the potassium channel KCND2, is a single-pass type II membrane protein. It is expressed mainly in brain tissues and may act as a modulator for cell surface expressed and activity of KCND2.

REFERENCES

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4. Strop, P., Bankovich, A.J., Hansen, K.C., Garcia, K.C. and Brunger, A.T. 2004. Structure of a human of the dipeptidyl aminopeptidase family. *J. Mol. Biol.* 343: 1055-1065.
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CHROMOSOMAL LOCATION

Genetic locus: DPP6 (human) mapping to 7q36.2; Dpp6 (mouse) mapping to 5 B1.

SOURCE

DPPX (E-20) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of DPPX 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.

Blocking peptide available for competition studies, sc-46923 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

STORAGE

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

APPLICATIONS

DPPX (E-20) is recommended for detection of DPPX 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).

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

Suitable for use as control antibody for DPPX siRNA (h): sc-60548, DPPX siRNA (m): sc-60549, DPPX shRNA Plasmid (h): sc-60548-SH, DPPX shRNA Plasmid (m): sc-60549-SH, DPPX shRNA (h) Lentiviral Particles: sc-60548-V and DPPX shRNA (m) Lentiviral Particles: sc-60549-V.

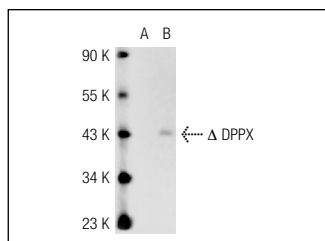
Molecular Weight of DPPX: 100 kDa.

Positive Controls: DPPX (h): 293T Lysate: sc-115718.

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™ compatible donkey anti-goat IgG-HRP: sc-2033 (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 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™ Mounting Medium: sc-24941.

DATA



DPPX (E-20): sc-46923. Western blot analysis of DPPX expression in non-transfected: sc-117752 (A) and human DPPX transfected: sc-115718 (B) 293T whole cell lysates.

RESEARCH USE

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

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Try **DPPX (A-8): sc-365147** or **DPPX (H-4): sc-398726**, our highly recommended monoclonal alternatives to DPPX (E-20).