

DPPX (h): 293T Lysate: sc-115718

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 DPP1 (dipeptidyl-peptidase 8, DPP8, MSTP141), DPP2 (dipeptidyl-peptidase 9, DPP9), DPP3 (DPPIII), DPP3 (dipeptidyl-peptidase 10, DPP10, DPL2, DPPY, DPP3), 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

1. Yokotani, N., et al. 1993. Non-conservation of a catalytic residue protein encoded by a gene on human chromosome 7. *Hum. Mol. Genet.* 2: 1037-1039.
2. Jerng, H.H., et al. 2004. Molecular physiology and modulation of somatodendritic A-type potassium channels. *Mol. Cell. Neurosci.* 27: 343-369.
3. Jerng, H.H., et al. 2004. Modulation of KV4.2 channel expression and gatin (DPP10). *Biophys. J.* 87: 2380-2396.
4. Strop, P., et al. 2004. Structure of a human of the dipeptidyl aminopeptidase family. *J. Mol. Biol.* 343: 1055-1065.
5. Zagha, E., et al. 2005. DPP10 modulates KV4-mediated A-type potassium channels. *J. Biol. Chem.* 280: 18853-18861.

CHROMOSOMAL LOCATION

Genetic locus: DPP6 (human) mapping to 7q36.2.

PRODUCT

DPPX (h): 293T Lysate represents a lysate of human DPPX transfected 293T cells and is provided as 100 µg protein in 200 µl SDS-PAGE buffer.

STORAGE

Store at -20° C. Repeated freezing and thawing should be minimized. Sample vial should be boiled once prior to use. Non-hazardous. No MSDS required.

APPLICATIONS

DPPX (h): 293T Lysate is suitable as a Western Blotting positive control for human reactive DPPX antibodies. Recommended use: 10-20 µl per lane.

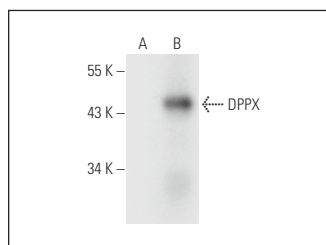
Control 293T Lysate: sc-117752 is available as a Western Blotting negative control lysate derived from non-transfected 293T cells.

DPPX (H-4): sc-398726 is recommended as a positive control antibody for Western Blot analysis of enhanced human DPPX expression in DPPX transfected 293T cells (starting dilution 1:100, dilution range 1:100-1:1,000).

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.

DATA



DPPX (H-4): sc-398726. 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.

PROTOCOLS

See our web site at www.scbt.com for detailed protocols and support products.