

# LYPD6 (E-11): sc-137591

## BACKGROUND

LYPD6 (LY6/PLAUR domain containing 6) is a 171 amino acid secreted protein that contains one UPAR/Ly6 domain and belongs to the Ly-6 superfamily. Members of the Ly-6 family contain a LU domain, which consists of approximately 80 amino acids and is characterized by a conserved pattern of 10 cysteine residues. LYPD6 is widely expressed with high expression in heart and brain. LYPD6 is suggested to function as a modulator of nicotinic acetylcholine receptors (AChRs) by affecting receptor function through selectively increasing Ca<sup>2+</sup> influx. Existing as two alternatively spliced isoforms and localizing to the cytoplasm, LYPD6 is encoded by a gene located on human chromosome 2q23.2. As the second largest human chromosome, chromosome 2 makes up approximately 8% of the human genome and contains 237 million bases encoding over 1,400 genes.

## REFERENCES

1. Tsuji, H., Okamoto, K., Matsuzaka, Y., Iizuka, H., Tamiya, G. and Inoko, H. 2003. SLURP-2, a novel member of the human Ly-6 superfamily that is up-regulated in psoriasis vulgaris. *Genomics* 81: 26-33.
2. Flanagan, K., Modrusan, Z., Cornelius, J., Chavali, A., Kasman, I., Komuves, L., Mo, L. and Diehl, L. 2008. Intestinal epithelial cell up-regulation of LY6 molecules during colitis results in enhanced chemokine secretion. *J. Immunol.* 180: 3874-3881.
3. Darvas, M., Morsch, M., Racz, I., Ahmadi, S., Swandulla, D. and Zimmer, A. 2009. Modulation of the Ca<sup>2+</sup> conductance of nicotinic acetylcholine receptors by Lypd6. *Eur. Neuropsychopharmacol.* 19: 670-681.
4. Choi, S.H., Kong, H.K., Park, S.Y. and Park, J.H. 2009. Metastatic effect of LY-6K gene in breast cancer cells. *Int. J. Oncol.* 35: 601-607.
5. Ni, J., Lang, Q., Bai, M., Zhong, C., Chen, X., Wan, B. and Yu, L. 2009. Cloning and characterization of a human LYPD7, a new member of the Ly-6 superfamily. *Mol. Biol. Rep.* 36: 697-703.
6. Zhang, Y., Lang, Q., Li, J., Xie, F., Wan, B. and Yu, L. 2010. Identification and characterization of human LYPD6, a new member of the Ly-6 superfamily. *Mol. Biol. Rep.* 37: 2055-2062.
7. Online Mendelian Inheritance in Man, OMIM<sup>™</sup>. 2010. Johns Hopkins University, Baltimore, MD. MIM Number: 613359. World Wide Web URL: <http://www.ncbi.nlm.nih.gov/omim/>

## CHROMOSOMAL LOCATION

Genetic locus: LYPD6 (human) mapping to 2q23.2; Lypd6 (mouse) mapping to 2 C1.1.

## SOURCE

LYPD6 (E-11) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the C-terminus of LYPD6 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 in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-137591 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

## APPLICATIONS

LYPD6 (E-11) is recommended for detection of LYPD6 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), 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); non cross-reactive with other LYPD family members.

LYPD6 (E-11) is also recommended for detection of LYPD6 in additional species, including equine, canine and bovine.

Suitable for use as control antibody for LYPD6 siRNA (h): sc-94410, LYPD6 siRNA (m): sc-149179, LYPD6 shRNA Plasmid (h): sc-94410-SH, LYPD6 shRNA Plasmid (m): sc-149179-SH, LYPD6 shRNA (h) Lentiviral Particles: sc-94410-V and LYPD6 shRNA (m) Lentiviral Particles: sc-149179-V.

Molecular Weight of LYPD6 isoforms: 19/9 kDa.

## 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<sup>™</sup> compatible donkey anti-goat IgG-HRP: sc-2033 (dilution range: 1:2000-1:5000), Cruz Marker<sup>™</sup> Molecular Weight Standards: sc-2035, TBS Blotto A Blocking Reagent: sc-2333 and Western Blotting Luminol Reagent: sc-2048. 2) 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<sup>™</sup> Mounting Medium: sc-24941.

## RESEARCH USE

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

## PROTOCOLS

See our web site at [www.scbt.com](http://www.scbt.com) or our catalog for detailed protocols and support products.