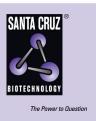
SANTA CRUZ BIOTECHNOLOGY, INC.

LYPD5 (S-17): sc-247919



BACKGROUND

LYPD5 (LY6/PLAUR domain containing 5), also known as PRO4356, is a 251 amino acid membrane protein that contains one UPAR/Ly6 domain and belongs the the Ly-6 superfamily. Members of the Ly-6 family contain an LU domain, which consists of approximately 80 amino acids and is characterized by a conserved pattern of 10 cysteine residues. Existing as two alternatively spliced isoforms and localizing to the cytoplasm, LYPD5 is encoded by a gene located on human chromosome 19q13.33. Chromosome 19 consists of approximately 63 million bases and makes up over 2% of human genomic DNA. Chromosome 19 is recognized for having the greatest gene density of the human chromosomes and it is the genetic home for a number of immunoglobulin (Ig) superfamily members, including the killer cell and leukocyte Ig-like receptors, a variety of ICAMs, the CEACAM and PSG families and Fc receptors (FcRs).

REFERENCES

- Teglund, S., Olsen, A., Khan, W.N., Frängsmyr, L. and Hammarström, S. 1994. The pregnancy-specific glycoprotein (PSG) gene cluster on human chromosome 19: fine structure of the 11 PSG genes and identification of 6 new genes forming a third subgroup within the carcinoembryonic antigen (CEA) family. Genomics 23: 669-684.
- Trowsdale, J., Barten, R., Haude, A., Stewart, C.A., Beck, S. and Wilson, M.J. 2001. The genomic context of natural killer receptor extended gene families. Immunol. Rev. 181: 20-38.
- 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 upregulated in psoriasis vulgaris. Genomics 81: 26-33.
- Barrow, A.D. and Trowsdale, J. 2008. The extended human leukocyte receptor complex: diverse ways of modulating immune responses. Immunol. Rev. 224: 98-123.
- Flanagan, K., Modrusan, Z., Cornelius, J., Chavali, A., Kasman, I., Komuves, L., Mo, L. and Diehl, L. 2008. Intestinal epithelial cell upregulation of LY6 molecules during colitis results in enhanced chemokine secretion. J. Immunol. 180: 3874-3881.
- Darvas, M., Morsch, M., Racz, I., Ahmadi, S., Swandulla, D. and Zimmer, A. 2009. Modulation of the Ca²⁺ conductance of nicotinic acetylcholine receptors by Lypd6. Eur. Neuropsychopharmacol. 19: 670-681.
- 7. 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.
- 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.
- 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.

STORAGE

Store at 4° C, **D0 NOT FREEZE**. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

CHROMOSOMAL LOCATION

Genetic locus: LYPD5 (human) mapping to 19q13.31.

SOURCE

LYPD5 (S-17) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of LYPD5 of human origin.

PRODUCT

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

Blocking peptide available for competition studies, sc-247919 P, (100 μ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

LYPD5 (S-17) is recommended for detection of LYPD5 of 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.

Suitable for use as control antibody for LYPD5 siRNA (h): sc-97141, LYPD5 shRNA Plasmid (h): sc-97141-SH and LYPD5 shRNA (h) Lentiviral Particles: sc-97141-V.

Molecular Weight of LYPD5 isoforms: 27/22 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™ 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) Immunofluo-rescence: 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.

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.