

LYPD3 (G-16): sc-243373

BACKGROUND

LYPD3 (LY6/PLAUR domain containing 3), also known as MIG-C4 (matrigel-induced gene C4 protein) or GPI-anchored metastasis-associated protein C4.4A homolog, is a 346 amino acid cell membrane protein that supports cell migration. Implicated in tumor progression and urothelial cell-matrix interactions, LYPD3 is expressed in skin, urothelium and placenta, with weak levels found in peripheral blood mononuclear cells and esophagus. Upregulated in migrating keratinocytes, LYPD3 undergoes post-translational N- and O-glycosylation, and contains two UPAR/Ly6 domains. The gene encoding LYPD3 maps to human chromosome 19q13.31. Chromosome 19 consists of over 63 million bases, houses approximately 1,400 genes and is recognized for having the greatest gene density of the human chromosomes. It is the genetic home for a number of immunoglobulin (Ig) superfamily members, including the killer cell and leukocyte Ig-like receptors, a number of ICAMs, the CEACAM and PSG families, and Fc receptors (FcRs).

REFERENCES

1. Teglund, S., et al. 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.
2. Wang, L., et al. 2000. C-CAM1, a candidate tumor suppressor gene, is abnormally expressed in primary lung cancers. *Clin. Cancer Res.* 6: 2988-2993.
3. Smith, B.A., et al. 2001. Identification of genes involved in human urothelial cell-matrix interactions: implications for the progression pathways of malignant urothelium. *Cancer Res.* 61: 1678-1685.
4. Würfel, J., et al. 2001. Cloning of the human homologue of the metastasis-associated rat C4.4A. *Gene* 262: 35-41.
5. Trowsdale, J., et al. 2001. The genomic context of natural killer receptor extended gene families. *Immunol. Rev.* 181: 20-38.
6. Fletcher, G.C., et al. 2003. hAG-2 and hAG-3, human homologues of genes involved in differentiation, are associated with oestrogen receptor-positive breast tumours and interact with metastasis gene C4.4a and dystroglycan. *Br. J. Cancer* 88: 579-585.
7. Hansen, L.V., et al. 2004. Structural analysis and tissue localization of human C4.4A: a protein homologue of the urokinase receptor. *Biochem. J.* 380: 845-857.
8. Le Meur, N., et al. 2004. Complete germline deletion of the STK11 gene in a family with Peutz-Jeghers syndrome. *Eur. J. Hum. Genet.* 12: 415-418.
9. Leeb, T., et al. 2004. Comparative human-mouse-rat sequence analysis of the ICAM gene cluster on HSA 19p13.2 and a 185-kb porcine region from SSC 2q. *Gene* 343: 239-244.

CHROMOSOMAL LOCATION

Genetic locus: LYPD3 (human) mapping to 19q13.31; Lypd3 (mouse) mapping to 7 A3.

RESEARCH USE

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

SOURCE

LYPD3 (G-16) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of LYPD3 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-243373 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

LYPD3 (G-16) is recommended for detection of LYPD3 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).

LYPD3 (G-16) is also recommended for detection of LYPD3 in additional species, including equine, canine, bovine and porcine.

Suitable for use as control antibody for LYPD3 siRNA (h): sc-97468, LYPD3 siRNA (m): sc-149176, LYPD3 shRNA Plasmid (h): sc-97468-SH, LYPD3 shRNA Plasmid (m): sc-149176-SH, LYPD3 shRNA (h) Lentiviral Particles: sc-97468-V and LYPD3 shRNA (m) Lentiviral Particles: sc-149176-V.

Molecular Weight of LYPD3: 36 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) 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.

STORAGE

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

PROTOCOLS

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