SANTA CRUZ BIOTECHNOLOGY, INC.

EDIL3 (4C9): sc-293337

BACKGROUND

EDIL3 (EGF-like repeats and discoidin I-like domains 3), also known as developmentally-regulated endothelial cell locus 1 protein or integrin-binding protein DEL1, is a 480 amino acid secreted glycoprotein that may act as an angiogenic factor during solid tumor formation. Expressed in embryonic endothelial cells, EDIL3 acts a ligand of Integrin $\alpha_V\beta_3$ to promote endothelial cell adhesion via an autocrine angiogenic signaling pathway. EDIL3 is also known to participate in vascular morphogenesis during embryonic development and is important for vessel wall remodeling. Containing three EGF-like domains and two F5/8 type C domains, EDIL3 exists as two alternatively spliced isoforms that are encoded by a gene mapping to human chromosome 5q14.3.

REFERENCES

1. Hidai, C., et al. 1998. Cloning and characterization of developmental endothelial locus-1: an embryonic endothelial cell protein that binds the $\alpha_V\beta_3$ Integrin receptor. Genes Dev. 12: 21-33.
2. Penta, K., et al. 1999. Del1 induces integrin signaling and angiogenesis by ligation of $\alpha_V\beta_3$. J. Biol. Chem. 274: 11101-11109.
3. Pfister, B.E., et al. 2001. Del1: a new protein in the superficial layer of articular cartilage. Biochem. Biophys. Res. Commun. 286: 268-273.
4. Rezaee, M., et al. 2002. Del1 mediates VSMC adhesion, migration, and proliferation through interaction with Integrin $\alpha_V\beta_3$. Am. J. Physiol. Heart Circ. Physiol. 282: H1924-H1932.
5. Aoka, Y., et al. 2002. The embryonic angiogenic factor Del1 accelerates tumor growth by enhancing vascular formation. Microvasc. Res. 64: 148-161.
6. Zhong, J., et al. 2003. Neovascularization of ischemic tissues by gene delivery of the extracellular matrix protein Del-1. J. Clin. Invest. 112: 30-41.
7. Choi, E.Y., et al. 2008. Del-1, an endogenous leukocyte-endothelial adhesion inhibitor, limits inflammatory cell recruitment. Science 322: 1101-1104.
8. Online Mendelian Inheritance in Man, OMIM™. 2009. Johns Hopkins University, Baltimore, MD. MIM Number: 606018. World Wide Web URL: http://www.ncbi.nlm.nih.gov/omim/

CHROMOSOMAL LOCATION

Genetic locus: EDIL3 (human) mapping to 5q14.3; Edil3 (mouse) mapping to 13 C3.

SOURCE

EDIL3 (4C9) is a mouse monoclonal antibody raised against amino acids 101-199 of EDIL3 of human origin.

PRODUCT

Each vial contains 100 µg IgG_{2a} kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

RESEARCH USE

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

APPLICATIONS

EDIL3 (4C9) is recommended for detection of EDIL3 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), immunohistochemistry (including paraffin-embedded sections) (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Suitable for use as control antibody for EDIL3 siRNA (h): sc-91971, EDIL3 siRNA (m): sc-143297, EDIL3 shRNA Plasmid (h): sc-91971-SH, EDIL3 shRNA Plasmid (m): sc-143297-SH, EDIL3 shRNA (h) Lentiviral Particles: sc-91971-V and EDIL3 shRNA (m) Lentiviral Particles: sc-143297-V.

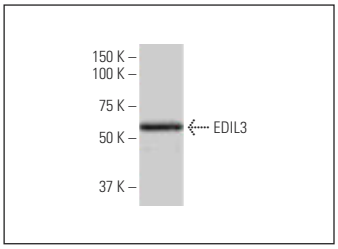
Molecular Weight of EDIL3: 54 kDa.

Positive Controls: human pancreas extract: sc-363770.

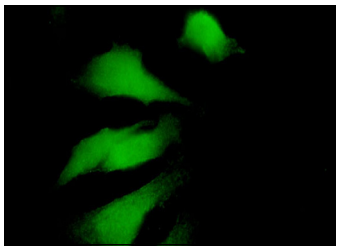
RECOMMENDED SUPPORT REAGENTS

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. 2) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) Immunofluorescence: use m-IgGκ BP-FITC: sc-516140 or m-IgGκ BP-PE: sc-516141 (dilution range: 1:50-1:200) with UltraCruz® Mounting Medium: sc-24941 or UltraCruz® Hard-set Mounting Medium: sc-359850. 4) Immunohistochemistry: use m-IgGκ BP-HRP: sc-516102 with DAB, 50X: sc-24982 and Immunohistomount: sc-45086, or Organo/Limonene Mount: sc-45087.

DATA



EDIL3 (4C9): sc-293337. Western blot analysis of EDIL3 expression in human pancreas tissue extract.



EDIL3 (4C9): sc-293337. Immunofluorescence staining of methanol-fixed HeLa cells showing extracellular localization.

SELECT PRODUCT CITATIONS

1. Chen, M.F., et al. 2023. The role of EDIL3 in maintaining cartilage extracellular matrix and inhibiting osteoarthritis development. Bone Joint Res. 12: 734-746.

STORAGE

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