

Dcun1D1 (m3): 293T Lysate: sc-123266

BACKGROUND

Dcun1D1, (defective in cullin neddylation protein 1-like protein 1 or DCN1-like protein 1), also designated Rp42, Tes3 or squamous cell carcinoma-related oncogene (SCCRO) is involved in the malignant transformation of squamous cell lineage. Dcun1D1 regulates Gli1, a key regulator of the hedgehog (HH) pathway that plays an important role in development, maintenance, and regeneration of almost all adult tissues. Vascular endothelial growth factor-A (VEGF-A) is co-expressed with Dcun1D1, and the two function to induce angiogenesis. Overexpression of the Dcun1D1 gene is associated with invasive tumor progression and a poor outcome in non-small cell lung cancer, and low-level Dcun1D1 expression in adjacent benign lung tissue predicts an even worse survival rate. Dcun1D1 expression may be a marker of progressive dedifferentiation in squamous cell tumors.

REFERENCES

1. Estilo, C.L., et al. 2003. The role of novel oncogenes squamous cell carcinoma-related oncogene and phosphatidylinositol 3-kinase p110 α in squamous cell carcinoma of the oral tongue. *Clin. Cancer Res.* 9: 2300-2306.
2. Lum, L. and Beachy, P.A. 2004. The hedgehog response network: sensors, switches, and routers. *Science* 304: 1755-1759.
3. Sarkaria, I.S., et al. 2004. SCCRO expression correlates with invasive progression in bronchioloalveolar carcinoma. *Ann. Thorac. Surg.* 78: 1734-1741.
4. Sarkaria, I.S., et al. 2004. Squamous cell carcinoma-related oncogene is highly expressed in developing, normal, and adenomatous adrenal tissue but not in aggressive adrenocortical carcinomas. *Surgery* 136: 1122-1128.
5. Talbot, S.G., et al. 2004. Squamous cell carcinoma related oncogene regulates angiogenesis through vascular endothelial growth factor-A. *Ann. Surg. Oncol.* 11: 530-534.
5. Kurz, T., et al. 2005. The conserved protein DCN-1/Dcn1p is required for cullin neddylation in *C. elegans* and *S. cerevisiae*. *Nature* 435: 1257-1261.
7. Jacques, C., et al. 2005. Two-step differential expression analysis reveals a new set of genes involved in thyroid oncocytic tumors. *J. Clin. Endocrinol. Metab.* 90: 2314-20.
8. Sarkaria, I., et al. 2006. Squamous cell carcinoma related oncogene/DCUN1D1 is highly conserved and activated by amplification in squamous cell carcinomas. *Cancer Res* 66: 9437-9444.

CHROMOSOMAL LOCATION

Genetic locus: Dcun1d1 (mouse) mapping to 3 B.

PRODUCT

Dcun1D1 (m3): 293T Lysate represents a lysate of mouse Dcun1D1 transfected 293T cells and is provided as 100 μ g protein in 200 μ l 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

Dcun1D1 (m3): 293T Lysate is suitable as a Western Blotting positive control for mouse reactive Dcun1D1 antibodies. Recommended use: 10-20 μ l per lane.

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

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.