SANTA CRUZ BIOTECHNOLOGY, INC.

Dysadherin (E-12): sc-515254

SANTA CRUZ BIOTECHNOLOGY

The Power to Question

BACKGROUND

Dysadherin (FXYD domain-containing ion transport regulator 5) is a cancer-associated cell membrane glycoprotein. Dysadherin down- regulates the expression of E-cadherin, the prime mediator of cell-cell adhesion in epithelial cells, by a posttranscriptional mechanism. Decreasing intercellular adhesiveness facilitates the metastasis of cancer cells. Dysadherin is present in spleen, lung, skeletal muscle, and testis tissue, and maps to human chromosome 19q13.12.

REFERENCES

1. Ino, Y., et al. 2002. Dysadherin, a cancer-associated cell membrane glycoprotein, downregulates E-cadherin and promotes metastasis. Proc. Natl. Acad. Sci. USA 99: 365-370.
2. Shimamura, T., et al. 2003. Dysadherin overexpression in pancreatic ductal adenocarcinoma reflects tumor aggressiveness: relationship to E-cadherin expression. J. Clin. Oncol. 21: 659-667.
3. Hirohashi, S. and Kanai, Y. 2003. Cell adhesion system and human cancer morphogenesis. Cancer Sci. 94: 575-581.
4. Sato, H., et al. 2003. Dysadherin: expression and clinical significance in thyroid carcinoma. J. Clin. Endocrinol. Metab. 88: 4407-4412.
5. Wu, D., et al. 2004. Prognostic significance of Dysadherin expression in cervical squamous cell carcinoma. Pathol. Oncol. Res. 10: 212-218.
6. Shimamura, T., et al. 2004. Dysadherin expression facilitates cell motility and metastatic potential of human pancreatic cancer cells. Cancer Res. 64: 6989-6995.

CHROMOSOMAL LOCATION

Genetic locus: FXYD5 (human) mapping to 19q13.12.

SOURCE

Dysadherin (E-12) is a mouse monoclonal antibody specific for an epitope mapping between amino acids 30-51 within an N-terminal extracellular domain of Dysadherin of human origin.

PRODUCT

Each vial contains 200 µg IgG_1 kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Dysadherin (E-12) is available conjugated to agarose (sc-515254 AC), 500 µg/ 0.25 ml agarose in 1 ml, for IP; to HRP (sc-515254 HRP), 200 µg/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-515254 PE), fluorescein (sc-515254 FITC), Alexa Fluor® 488 (sc-515254 AF488), Alexa Fluor® 546 (sc-515254 AF546), Alexa Fluor® 594 (sc-515254 AF594) or Alexa Fluor® 647 (sc-515254 AF647), 200 µg/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor® 680 (sc-515254 AF680) or Alexa Fluor® 790 (sc-515254 AF790), 200 µg/ml, for Near-Infrared (NIR) WB, IF and FCM.

Blocking peptide available for competition studies, sc-515254 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% stabilizer protein).

APPLICATIONS

Dysadherin (E-12) is recommended for detection of Dysadherin isoform 1 of human origin by Western Blotting (starting dilution 1:100, 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) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Suitable for use as control antibody for Dysadherin siRNA (h): sc-45745, Dysadherin shRNA Plasmid (h): sc-45745-SH and Dysadherin shRNA (h) Lentiviral Particles: sc-45745-V.

Molecular Weight (predicted) of Dysadherin: 19 kDa.

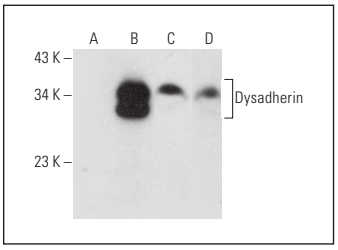
Molecular Weight (observed) of Dysadherin: 35/47 kDa.

Positive Controls: Dysadherin (h): 293 Lysate: sc-111349, JAR cell lysate: sc-2276 or A549 nuclear extract: sc-551597.

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.

DATA



Dysadherin (E-12): sc-515254. Western blot analysis of Dysadherin expression in non-transfected 293: sc-110760 (**A**), human Dysadherin transfected 293: sc-111349 (**B**) and JAR (**C**) whole cell lysates and A549 nuclear extract (**D**).

STORAGE

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

RESEARCH USE

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