SANTA CRUZ BIOTECHNOLOGY, INC.

NUDT6 (F-2): sc-398717

SANTA CRUZ BIOTECHNOLOGY

The Power to Question

BACKGROUND

NUDT6 (nudix (nucleoside diphosphate linked moiety X)-type motif 6), also known as antisense basic fibroblast growth factor or GFG-1, is a member of the Nudix hydrolase family of pyrophosphatases. Nudix hydrolases contain a characteristic Nudix domain and are responsible for catalyzing the hydrolysis of nucleoside diphosphate derivatives. The gene encoding NUDT6 is a FGF-2 gene antisense transcript, and NUDT6 is believed to regulate FGF-2 expression. FGF-2 is a mutifunctional heparin-binding growth factor important to angiogenesis, neuroectoderm development and wound healing. NUDT6 is expressed as two isoforms produced by alternative splicing.

REFERENCES

1. Murphy, P.R. and Knee, R.S. 1994. Identification and characterization of an antisense RNA transcript (gfg) from the human basic fibroblast growth factor gene. Mol. Endocrinol. 8: 852-859.
2. Li, A.W., et al. 1997. FGF-2 antisense RNA encodes a nuclear protein with MutT-like antimutator activity. Mol. Cell. Endocrinol. 133: 177-182.
3. Gagnon, M.L., et al. 1999. Characterization of the promoter for the human antisense fibroblast growth factor-2 gene; regulation by Ets in Jurkat T cells. J. Cell. Biochem. 72: 492-506.
4. Duplan, S.M., et al. 2002. Antitumor activity of fibroblast growth factors (FGFs) for medulloblastoma may correlate with FGF receptor expression and tumor variant. Clin. Cancer Res. 8: 246-257.
5. Sheng, Z., et al. 2004. Nuclear and nucleolar localization of 18-kDa fibroblast growth factor-2 is controlled by C-terminal signals. J. Biol. Chem. 279: 40153-40160.
6. Pezzatini, S., et al. 2007. Nanostructured HA crystals up-regulate FGF-2 expression and activity in microvascular endothelium promoting angiogenesis. Bone 41: 523-534.

CHROMOSOMAL LOCATION

Genetic locus: NUDT6 (human) mapping to 4q28.1; Nudt6 (mouse) mapping to 3 B.

SOURCE

NUDT6 (F-2) is a mouse monoclonal antibody raised against amino acids 191-316 mapping at the C-terminus of NUDT6 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.

NUDT6 (F-2) is available conjugated to agarose (sc-398717 AC), 500 µg/ 0.25 ml agarose in 1 ml, for IP; to HRP (sc-398717 HRP), 200 µg/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-398717 PE), fluorescein (sc-398717 FITC), Alexa Fluor® 488 (sc-398717 AF488), Alexa Fluor® 546 (sc-398717 AF546), Alexa Fluor® 594 (sc-398717 AF594) or Alexa Fluor® 647 (sc-398717 AF647), 200 µg/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor® 680 (sc-398717 AF680) or Alexa Fluor® 790 (sc-398717 AF790), 200 µg/ml, for Near-Infrared (NIR) WB, IF and FCM.

APPLICATIONS

NUDT6 (F-2) is recommended for detection of NUDT6 of mouse, rat and 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 NUDT6 siRNA (h): sc-75975, NUDT6 siRNA (m): sc-75976, NUDT6 shRNA Plasmid (h): sc-75975-SH, NUDT6 shRNA Plasmid (m): sc-75976-SH, NUDT6 shRNA (h) Lentiviral Particles: sc-75975-V and NUDT6 shRNA (m) Lentiviral Particles: sc-75976-V.

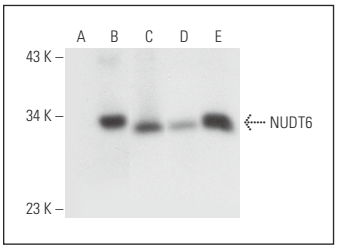
Molecular Weight of NUDT6: 35 kDa.

Positive Controls: NUDT6 (h): 293T Lysate: sc-173806, NCI-H460 whole cell lysate: sc-364235 or human liver extract: sc-363766.

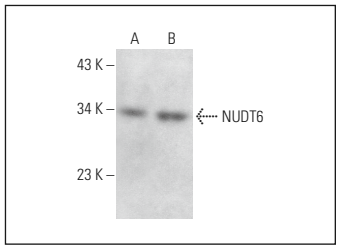
RECOMMENDED SUPPORT REAGENTS

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



NUDT6 (F-2): sc-398717. Western blot analysis of NUDT6 expression in non-transfected 293T: sc-117752 (**A**), human NUDT6 transfected 293T: sc-173806 (**B**), NCI-H460 (**C**) and Hep G2 (**D**) whole cell lysates and human liver tissue extract (**E**).



NUDT6 (F-2): sc-398717. Western blot analysis of NUDT6 expression in Hep G2 (**A**) and NTERA-2 cl.D1 (**B**) whole cell lysates.

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.