SANTA CRUZ BIOTECHNOLOGY, INC.

IGF2BP2 (F-12): sc-377014

SANTA CRUZ BIOTECHNOLOGY

The Power to Question

BACKGROUND

IGF2BP2 (Insulin-like growth factor 2 mRNA binding protein 2) is also known as IGF2 mRNA-binding protein 2, IMP-2 (IGF-II mRNA-binding protein 2), VICKZ family member 2 or hepatocellular carcinoma autoantigen p62 and is a 556 amino acid protein. IGF2BP2 is expressed in a variety of tissues including heart, placenta, skeletal muscle, pancreas, fetal liver, lung, kidney, thymus and gonadal cells. IGF2BP2 is an RNA binding protein which may be involved in the regulation of mRNA translation and may also function to control the spatial localization of target mRNAs. Antibodies against IGF2BP2 have been detected in patients with HCC (hepatocellular carcinoma), suggesting that IGF2BP2 may have a role in the pathogenesis of HCC. Defects in IGF2BP2 are thought to be associated with susceptibility to type two diabetes mellitus.

CHROMOSOMAL LOCATION

Genetic locus: IGF2BP2 (human) mapping to 3q27.2.

SOURCE

IGF2BP2 (F-12) is a mouse monoclonal antibody raised against amino acids 367-436 mapping within an internal region of IGF2BP2 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.

IGF2BP2 (F-12) is available conjugated to agarose (sc-377014 AC), 500 µg/ 0.25 ml agarose in 1 ml, for IP; to HRP (sc-377014 HRP), 200 µg/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-377014 PE), fluorescein (sc-377014 FITC), Alexa Fluor® 488 (sc-377014 AF488), Alexa Fluor® 546 (sc-377014 AF546), Alexa Fluor® 594 (sc-377014 AF594) or Alexa Fluor® 647 (sc-377014 AF647), 200 µg/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor® 680 (sc-377014 AF680) or Alexa Fluor® 790 (sc-377014 AF790), 200 µg/ml, for Near-Infrared (NIR) WB, IF and FCM.

STORAGE

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

APPLICATIONS

IGF2BP2 (F-12) is recommended for detection of IGF2BP2 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), 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 IGF2BP2 siRNA (h): sc-78065, IGF2BP2 shRNA Plasmid (h): sc-78065-SH and IGF2BP2 shRNA (h) Lentiviral Particles: sc-78065-V.

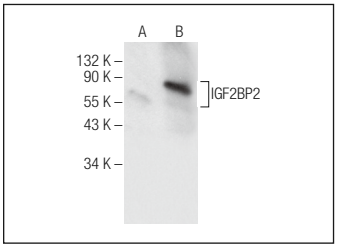
Molecular Weight of IGF2BP2: 62 kDa.

Positive Controls: IGF2BP2 (h2): 293T Lysate: sc-174608 or Hep G2 cell lysate: sc-2227.

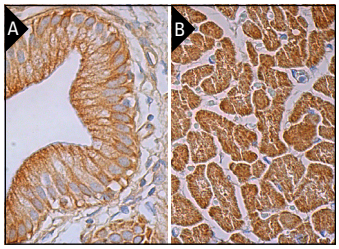
RECOMMENDED SUPPORT REAGENTS

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



IGF2BP2 (F-12): sc-377014. Western blot analysis of IGF2BP2 expression in non-transfected: sc-117752 (**A**) and human IGF2BP2 transfected: sc-174608 (**B**) 293T whole cell lysates.



IGF2BP2 (F-12): sc-377014. Immunoperoxidase staining of formalin fixed, paraffin-embedded human gall bladder tissue showing cytoplasmic staining of glandular cells (**A**). Immunoperoxidase staining of formalin fixed, paraffin-embedded human heart muscle tissue showing cytoplasmic staining of myocytes (**B**).

SELECT PRODUCT CITATIONS

1. Ding, L., et al. 2017. MicroRNA-188 acts as a tumour suppressor in glioma by directly targeting the IGF2BP2 gene. Mol. Med. Rep. 16: 7124-7130.
2. Zhang, R., et al. 2020. TRIM11 facilitates chemoresistance in nasopharyngeal carcinoma by activating the β-catenin/ABCC9 axis via p62-selective autophagic degradation of Daple. Oncogenesis 9: 45.
3. Yang, M., et al. 2020. Human Insulin growth factor 2 mRNA binding protein 2 increases miR-33a/b inhibition of liver ABCA1 expression and alters low-density apolipoprotein levels in mice. Mol. Cell. Biol. 40: e00058-20.
4. Cai, R., et al. 2021. Lnc-ORA interacts with microRNA-532-3p and IGF2BP2 to inhibit skeletal muscle myogenesis. J. Biol. Chem. 296: 100376.
5. Ye, H., et al. 2021. The m^6A writers regulated by the IL-6/STAT3 inflammatory pathway facilitate cancer cell stemness in cholangiocarcinoma. Cancer Biol. Med. 19: 343-357.
6. Wu, S., et al. 2024. Targeting high circDNA2v levels in colorectal cancer induces cellular senescence and elicits an anti-tumor secretome. Cell Rep. 43: 114111.

RESEARCH USE

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