SANTA CRUZ BIOTECHNOLOGY, INC.

β2-chimaerin (A-23): sc-130926

BACKGROUND

β-chimaerin, also known as Rho GTPase-activating protein 3 and CHN2, is a 468 amino acid GTPase-activating protein. Localized to the membrane, β-chimaerin inactivates the GTP-hydrolase Rac 1 in a diacylglycerol-dependent manner. As insufficient expression of β-chimaerin leads to higher Rac activity, which directly affects cancer cell-cycle progression and proliferation, β-chimaerin has been implicated in tumor progression. Additionally, β-chimaerin has been identified to play a role in T cell receptor signaling by affecting phorbol ester and SDF-1-regulated T cell responses. Expressed highly in the brain and pancreas, β-chimaerin contains one phorbol-ester/DAG-type zinc finger, a Rho GAP domain and a SH2 domain. Two isoforms of β-chimaerin exist as a result of alternative splicing events.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: CHN2 (human) mapping to 7p15.1; Chn2 (mouse) mapping to 6 B3.

RESEARCH USE

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

SOURCE

β2-chimaerin (A-23) is an affinity purified rabbit polyclonal antibody raised against synthetic β2-chimaerin peptide of human origin.

PRODUCT

Each vial contains 50 µg IgG in 500 µl PBS with < 0.1% sodium azide, 0.1% gelatin and < 0.02% sucrose.

APPLICATIONS

β2-chimaerin (A-23) is recommended for detection of β2-chimaerin 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)] and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Suitable for use as control antibody for β2-chimaerin siRNA (h): sc-89390, β2-chimaerin siRNA (m): sc-108587, β2-chimaerin shRNA Plasmid (h): sc-89390-SH, β2-chimaerin shRNA Plasmid (m): sc-108587-SH, β2-chimaerin shRNA (h) Lentiviral Particles: sc-89390-V and β2-chimaerin shRNA (m) Lentiviral Particles: sc-108587-V.

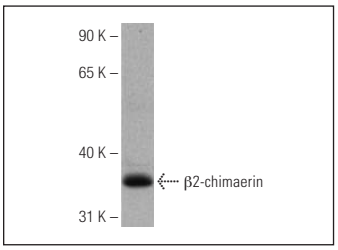
Molecular Weight of β2-chimaerin: 54 kDa.

Positive Controls: human fetal liver tissue.

RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use goat anti-rabbit IgG-HRP: sc-2004 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible goat anti-rabbit IgG-HRP: sc-2030 (dilution range: 1:2000-1:5000), Cruz Marker™ Molecular Weight Standards: sc-2035, TBS Blotto A Blocking Reagent: sc-2333 and Western Blotting Luminol Reagent: sc-2048. 2) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml).

DATA



β2-chimaerin (A-23): sc-130926. Western blot analysis of β2-chimaerin expression in human fetal liver tissue extract.

STORAGE

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