

β2-chimaerin (N-14): sc-162445

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 7p14.3.

SOURCE

β2-chimaerin (N-14) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the N-terminus of β2-chimaerin of human origin.

PRODUCT

Each vial contains 200 μg IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-162445 P, (100 μg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

β2-chimaerin (N-14) is recommended for detection of β2-chimaerin of 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)], 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); non cross-reactive with α-chimaerin.

β2-chimaerin (N-14) is also recommended for detection of β2-chimaerin in additional species, including canine, porcine and avian.

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

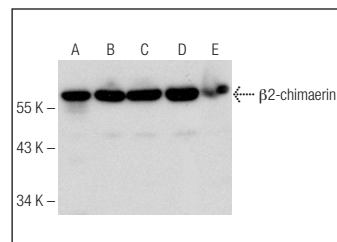
Molecular Weight of β2-chimaerin: 54 kDa.

Positive Controls: IMR-32 cell lysate: sc-2409, MIA PaCa-2 cell lysate: sc-2285 or Jurkat whole cell lysate: sc-2204.

RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use donkey anti-goat IgG-HRP: sc-2020 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible donkey anti-goat IgG-HRP: sc-2033 (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). 3) Immunofluorescence: use donkey anti-goat IgG-FITC: sc-2024 (dilution range: 1:100-1:400) or donkey anti-goat IgG-TR: sc-2783 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

DATA



β2-chimaerin (N-14): sc-162445. Western blot analysis of β2-chimaerin expression in TE 671 (A), IMR-32 (B), MIA PaCa-2 (C), Jurkat (D) and U-87 MG (E) 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.