

EF-HA2 (Y-14): sc-87098

BACKGROUND

The EF-hand domain is a 12 amino acid loop motif that is commonly found in proteins that participate in calcium-binding events within the cell. EF-hand domains generally exist in a pair that, together, form a stable four-helix bundle that enables the binding of calcium ions. EF-HA2 (EF-hand domain family, member A2) is a 530 amino acid single-pass membrane protein that contains 3 EF-hand domains, suggesting a role for EF-HA2 in calcium-mediated events throughout the cell. The gene encoding EF-HA2 maps to human chromosome 8, which consists of nearly 146 million base pairs, houses more than 800 genes and is associated with a variety of diseases and malignancies. Schizophrenia, bipolar disorder, Trisomy 8, Pfeiffer syndrome, congenital hypothyroidism, Waardenburg syndrome and some leukemias and lymphomas are thought to occur as a result of defects in specific genes that maps to chromosome 8.

REFERENCES

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- Selicorni, A., et al. 2002. Cytogenetic mapping of a novel locus for type II Waardenburg syndrome. *Hum. Genet.* 110: 64-67.
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CHROMOSOMAL LOCATION

Genetic locus: EFHA2 (human) mapping to 8p22; Efha2 (mouse) mapping to 8 A4.

SOURCE

EF-HA2 (Y-14) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of EF-HA2 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-87098 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

EF-HA2 (Y-14) is recommended for detection of EF-HA2 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)], 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).

EF-HA2 (Y-14) is also recommended for detection of EF-HA2 in additional species, including equine, canine, bovine and porcine.

Suitable for use as control antibody for EF-HA2 siRNA (h): sc-77812, EF-HA2 siRNA (m): sc-108877, EF-HA2 shRNA Plasmid (h): sc-77812-SH, EF-HA2 shRNA Plasmid (m): sc-108877-SH, EF-HA2 shRNA (h) Lentiviral Particles: sc-77812-V and EF-HA2 shRNA (m) Lentiviral Particles: sc-108877-V.

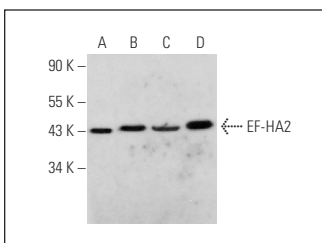
Molecular Weight of EF-HA2: 61 kDa.

Positive Controls: Jurkat whole cell lysate: sc-2204, Neuro-2A whole cell lysate: sc-364185 or Hep G2 cell lysate: sc-2227.

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



EF-HA2 (Y-14): sc-87098. Western blot analysis of EF-HA2 expression in Jurkat (A), Hep G2 (B), NIH/3T3 (C) and Neuro-2A (D) 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.