

## EF-HA1 (D-15): sc-84096

### BACKGROUND

The EF-hand domain is a twelve 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-HA1 (EF-hand domain family, member A1) is a 434 amino acid protein that contains 4 EF-hand domains, suggesting a role in calcium-mediated events throughout the cell. The gene encoding EF-HA1 maps to human chromosome 13, which houses over 400 genes, such as BRCA2 and RB1, and comprises nearly 4% of the human genome. Trisomy 13, also known as Patau syndrome, is deadly and the few who survive past one year suffer from permanent neurologic defects, difficulty eating and vulnerability to serious respiratory infections.

### REFERENCES

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- Dunham, A., Matthews, L.H., Burton, J., Ashurst, J.L., Howe, K.L., Ashcroft, K.J., Beare, D.M., Burford, D.C., Hunt, S.E., Griffiths-Jones, S., Jones, M.C., Keenan, S.J., Oliver, K., et al. 2004. The DNA sequence and analysis of human chromosome 13. *Nature* 428: 522-528.
- Katoh, M. and Katoh, M. 2005. Comparative genomics on FGF20 orthologs. *Oncol. Rep.* 14: 287-290.
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### CHROMOSOMAL LOCATION

Genetic locus: EFHA1 (human) mapping to 13q12.11; Efha1 (mouse) mapping to 14 C3.

### SOURCE

EF-HA1 (D-15) is an affinity purified rabbit polyclonal antibody raised against a peptide mapping near the C-terminus of EF-HA1 of human origin.

### PRODUCT

Each vial contains 100 µg IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-84096 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

### 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.

### APPLICATIONS

EF-HA1 (D-15) is recommended for detection of EF-HA1 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-HA1 (D-15) is also recommended for detection of EF-HA1 in additional species, including equine, canine and bovine.

Suitable for use as control antibody for EF-HA1 siRNA (h): sc-105321, EF-HA1 siRNA (m): sc-143309, EF-HA1 shRNA Plasmid (h): sc-105321-SH, EF-HA1 shRNA Plasmid (m): sc-143309-SH, EF-HA1 shRNA (h) Lentiviral Particles: sc-105321-V and EF-HA1 shRNA (m) Lentiviral Particles: sc-143309-V.

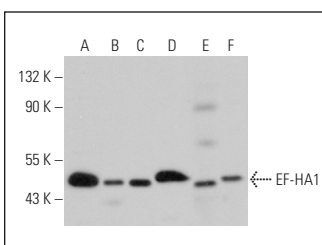
Molecular Weight of EF-HA1: 50 kDa.

Positive Controls: mouse pancreas extract: sc-364244, MCF7 whole cell lysate: sc-2206 or HEK293 whole cell lysate: sc-45136.

### 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). 3) Immunofluorescence: use goat anti-rabbit IgG-FITC: sc-2012 (dilution range: 1:100-1:400) or goat anti-rabbit IgG-TR: sc-2780 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

### DATA



EF-HA1 (D-15): sc-84096. Western blot analysis of EF-HA1 expression in HeLa (A), U-87 MG (B), MCF7 (C) and HEK293 (D) whole cell lysates and human fetal kidney (E) and mouse pancreas (F) tissue extracts.

### PROTOCOLS

See our web site at [www.scbt.com](http://www.scbt.com) or our catalog for detailed protocols and support products.