IPCEF1 (F-22): sc-133692



The Power to Question

BACKGROUND

IPCEF1 (interaction protein for cytohesin exchange factors 1), also known as PIP3-E, is a 437 amino acid protein that localizes to both the cytoplasm and the cell membrane and contains one PH domain. Interacting with the guanine nucleotide exchange factors Cytohesin-1, Cytohesin-2, GRP1 and Cytohesin-4, IPCEF1 enhances the guanine nucleotide exchange activity of Cytohesins with ARF6, thereby modifying ARF6 function and playing a role in Actin reorganization and membrane ruffling. Multiple isoforms of IPCEF1 exist due to alternative splicing events. The gene encoding IPCEF1 maps to human chromosome 6, which contains 170 million base pairs and comprises nearly 6% of the human genome. Deletion of a portion of the q arm of chromosome 6 is associated with early onset intestinal cancer, suggesting the presence of a cancer susceptibility locus. Additionally, Porphyria cutanea tarda, Parkinson's disease, Stickler syndrome and a susceptibility to bipolar disorder are all associated with genes that map to chromosome 6.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: PIP3-E (human) mapping to 6q25.2.

STORAGE

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

SOURCE

IPCEF1 (F-22) is a Protein A purified rabbit polyclonal antibody raised against synthetic IPCEF1 peptide of human origin.

PRODUCT

Each vial contains 100 μg lgG in 1.0 ml PBS with < 0.1% sodium azide, 0.1% gelatin and < 0.02% sucrose.

APPLICATIONS

IPCEF1 (F-22) is recommended for detection of IPCEF1 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)] and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Suitable for use as control antibody for IPCEF1 siRNA (h): sc-95627, IPCEF1 shRNA Plasmid (h): sc-95627-SH and IPCEF1 shRNA (h) Lentiviral Particles: sc-95627-V.

Molecular Weight of (predicted) IPCEF1: 46 kDa.

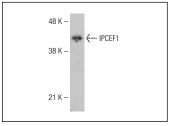
Molecular Weight of (observed) IPCEF1: 42 kDa.

Positive Controls: Hep G2 cell lysate: sc-2227.

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



IPCEF1 (F-22): sc-133692. Western blot analysis of IPCEF1 expression in Hep G2 whole cell lysate.

RESEARCH USE

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

PROTOCOLS

See our web site at www.scbt.com or our catalog for detailed protocols and support products.