CAS4 (P-14): sc-85413



The Power to Question

BACKGROUND

Cas scaffolding protein family member 4, CAS4, also designated CASS4, HEFL (HEF-like protein), HEPL or C20orf32 is a 786 amino acid protein belonging to the CAS family which also includes p130 Cas, Sin and Cas-L. CAS4 is phosphorylated on tyrosines by SRC, interacts directly with focal adhesion kinase, FAK via its C-terminal SH3 domain and is thought to function as a possible docking protein involved in tyrosine-kinase-based signaling as it relates to cell adhesion. CAS4 is localized to the cytoplasm and cytoskeleton with most abundant expression found in lung and spleen. High expression has also been observed in both ovarian and leukemia cell lines. Multiple isoforms of CAS4 exist due to alternative splicing events. The gene encoding CAS4 maps to human chromosome 20 which represents about 2% of human DNA; chromosome 20 consists of approximately 63 million bases and 600 genes.

REFERENCES

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STORAGE

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

PROTOCOLS

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

CHROMOSOMAL LOCATION

Genetic locus: CASS4 (human) mapping to 20q13.31; Cass4 (mouse) mapping to 2 H3.

SOURCE

CAS4 (P-14) is an affinity purified rabbit polyclonal antibody raised against a peptide mapping within an internal region of CAS4 of human origin.

PRODUCT

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

Blocking peptide available for competition studies, sc-85413 P, (100 μ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

CAS4 (P-14) is recommended for detection of CAS4 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 μ g per 100-500 μ g 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).

Suitable for use as control antibody for CAS4 siRNA (h): sc-72733, CAS4 siRNA (m): sc-142014, CAS4 shRNA Plasmid (h): sc-72733-SH, CAS4 shRNA Plasmid (m): sc-142014-SH, CAS4 shRNA (h) Lentiviral Particles: sc-72733-V and CAS4 shRNA (m) Lentiviral Particles: sc-142014-V.

Molecular Weight of CAS4: 105 kDa.

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.

RESEARCH USE

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

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