

CLASP2 (F-18): sc-102445

BACKGROUND

CLASP2 (cytoplasmic linker associated protein 2), also known as KIAA0627 or hOrbit2, is an 1,294 amino acid protein that contains 5 HEAT repeats and localizes to the cytoplasm and the cytoskeleton, as well as to the kinetochore and the Golgi apparatus. Expressed primarily in brain tissue, CLASP2 functions as a microtubule plus-end tracking protein that regulates the stability of dynamic microtubules and is required for the proper polarization of cytoplasmic microtubule arrays in migrating cells. CLASP2 interacts with EB1, EB3, ELKS and CLIP-115 and, in addition to stabilizing microtubules, plays an important role in maintaining the stability of the kinetochore and is crucial for proper chromosomal alignment. CLASP2 is subject to phosphorylation by GSK-3 β , an event that is thought to negatively regulate the ability of CLASP2 to bind to microtubules. Two isoforms of CLASP2, designated β and γ , exist due to alternative splicing events.

CHROMOSOMAL LOCATION

Genetic locus: CLASP2 (human) mapping to 3p22.3; Clasp2 (mouse) mapping to 9 F3.

SOURCE

CLASP2 (F-18) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of CLASP2 of human origin.

PRODUCT

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

Blocking peptide available for competition studies, sc-102445 P, (100 μ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

RESEARCH USE

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

APPLICATIONS

CLASP2 (F-18) is recommended for detection of CLASP2 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); non cross-reactive with CLASP1.

CLASP2 (F-18) is also recommended for detection of CLASP2 in additional species, including equine, canine, bovine and porcine.

Suitable for use as control antibody for CLASP2 siRNA (h): sc-78538, CLASP2 siRNA (m): sc-142361, CLASP2 shRNA Plasmid (h): sc-78538-SH, CLASP2 shRNA Plasmid (m): sc-142361-SH, CLASP2 shRNA (h) Lentiviral Particles: sc-78538-V and CLASP2 shRNA (m) Lentiviral Particles: sc-142361-V.

Molecular Weight of CLASP2 β : 47 kDa.

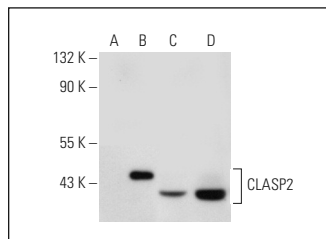
Molecular Weight of CLASP2 γ : 160 kDa.

Positive Controls: COLO 320DM cell lysate: sc-2226, HeLa whole cell lysate: sc-2200 or CLASP2 (h): 293T Lysate: sc-114389.

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



CLASP2 (F-18): sc-102445. Western blot analysis of CLASP2 expression in non-transfected 293T: sc-117752 (A), human CLASP2 transfected 293T: sc-114389 (B), HeLa (C) and COLO 320DM (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.

PROTOCOLS

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

MONOS
Satisfaction
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Try **CLASP2 (F-3): sc-376496** or **CLASP2 (A-6): sc-514839**, our highly recommended monoclonal alternatives to CLASP2 (F-18).