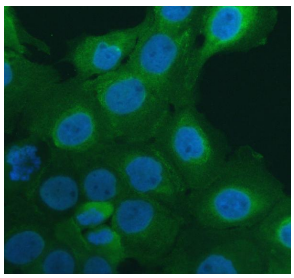
EPS8L2 Antibody / EPS8 signaling adaptor L2 Antibody (FY13637)

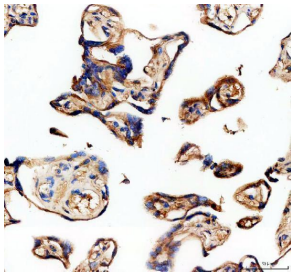
Catalog No.	Formulation	Size
FY13637	0.5mg/ml if reconstituted with 0.2ml sterile DI water	100 ug

Bulk quote request

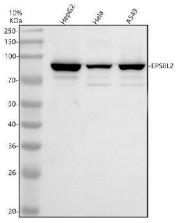
Species Reactivity	Human
Format	Antigen affinity purified
Host	Rabbit
Clonality	Polyclonal (rabbit origin)
Isotype	Rabbit Ig
Buffer	Each vial contains 4 mg Trehalose, 0.9 mg NaCl, 0.2 mg Na2HPO4.
UniProt	Q9H6S3
Applications	Western blot: 0.5-1ug/ml Immunohistochemistry (FFPE): 2-5ug/ml Immunofluorescence: 5ug/ml Immunoprecipitation: 2ug per 500ug of lysate ELISA: 0.1-0.5 ug/ml
Limitations	For research use only, this EPS8L2 Antibody / EPS8 signaling adaptor L2 Antibody is not intended for diagnostic or therapeutic use.



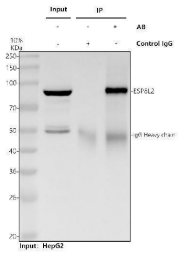
EPS8L2 Antibody by IF in A431 cells. Immunofluorescence analysis using EPS8 signaling adaptor L2 Antibody shows green fluorescence predominantly in the cytoplasm and cell periphery of A431 cells, with DAPI-stained nuclei in blue. Cells underwent enzyme antigen retrieval and were incubated with 5 ug/mL primary antibody overnight at 4oC, followed by a fluorescent secondary antibody. The distribution is compatible with a role in actin-associated cellular structures, although no cytoskeletal colocalization marker is included.



EPS8L2 Antibody by IHC in human placenta. Immunohistochemistry of paraffin-embedded human placenta using EPS8 signaling adaptor L2 Antibody reveals brown DAB staining in placental villous structures, with hematoxylin-counterstained nuclei. Sections underwent EDTA antigen retrieval at pH 8.0 and were incubated with 2 ug/mL primary antibody overnight at 4oC before peroxidase-based visualization.



EPS8L2 Antibody by WB in human cell lines. Western blot analysis using EPS8 signaling adaptor L2 Antibody detects a prominent band consistent with the expected molecular weight of approximately 81 kDa in human HepG2 (lane 1), HeLa (lane 2), and A549 (lane 3) whole-cell lysates. Reduced samples containing 30 ug protein per lane were resolved by 10% SDS-PAGE and transferred to nitrocellulose. After blocking with 5% nonfat milk, membranes were incubated with 0.5 ug/mL primary antibody overnight at 4oC. Bound antibody was visualized using an HRP-conjugated secondary antibody and chemiluminescent substrate.



EPS8L2 Antibody by IP in HepG2 cells. Immunoprecipitation of EPS8L2 from human HepG2 whole-cell lysate was assessed by Western blot using EPS8 signaling adaptor L2 Antibody. Lane 1 contains input lysate (30 ug), lane 2 the rabbit IgG control immunoprecipitate, and lane 3 the specific immunoprecipitate prepared using 2 ug antibody and 500 ug lysate. A band consistent with the expected approximately 81 kDa protein is present in input and the specific immunoprecipitate. The approximately 50 kDa band in the control lane is consistent with immunoglobulin heavy chain.

Description

EPS8L2 Antibody / EPS8 signaling adaptor L2 Antibody targets an actin-associated protein in the EPS8 family, whose members help coordinate the organization of filamentous actin at dynamic cell surfaces. EPS8L2 is related to epidermal growth factor receptor pathway substrate 8, but family resemblance does not establish identical interactions or regulatory roles. Its biology is closely connected to the remodeling of actin structures that support membrane protrusions, cellular shape, and mechanical stability.

Actin filaments grow and shrink through regulated addition and loss of monomers at their ends. Proteins that bind filament ends or bundle neighboring filaments can alter the geometry and persistence of actin-rich projections. EPS8-family proteins participate in such processes through domains involved in protein interactions and actin regulation. The activity of individual family members depends on their binding partners and cellular localization, making the composition of local actin-regulatory complexes particularly important.

EPS8L2 has attracted attention in sensory hair cells of the inner ear, which possess precisely organized actin-based stereocilia. Stereocilia are not conventional motile cilia; they are specialized microvillar projections whose graded heights and mechanical connections enable sound-induced movement to be converted into electrical signaling. Their actin cores must retain appropriate length and organization despite repeated mechanical stimulation. Genetic studies have linked EPS8L2 dysfunction with hearing impairment, supporting a role in maintaining the architecture or long-term stability of these structures.

Actin regulation is also relevant to epithelial surface morphology and the formation of cellular projections outside the auditory system. However, the contribution of EPS8L2 in a particular tissue should be distinguished from functions demonstrated for EPS8 or other paralogs. NSJ Bioreagents offers this EPS8L2 Antibody to support studies of how EPS8L2 participates in actin filament organization and the structural maintenance of stereocilia. Understanding these mechanisms may help explain why small changes in cytoskeletal regulation can have disproportionate consequences for sensory function.

Explore related research targets in our Cell Biology Antibodies collection.

Application Notes

Optimal working dilutions for the EPS8L2 Antibody / EPS8 signaling adaptor L2 Antibody should be established experimentally for each assay.

Immunogen

The EPS8L2 Antibody was generated using e. coli-derived human EPS8L2 recombinant protein (amino acids H47-S715).

Storage

After reconstitution, keep the EPS8L2 Antibody at 4oC for up to one month. Alternatively, store aliquots at -20oC for up to six months. Avoid multiple freezing and thawing cycles.

Alternate Names

EPS8L2 antibody, Epidermal growth factor receptor kinase substrate 8-like protein 2 antibody, EPS8 signaling adaptor L2 antibody, EPS8R2 antibody, PP13181 antibody, EPS8-like protein 2 antibody, Epidermal growth factor receptor pathway substrate 8-related protein 2 antibody, EPS8-related protein 2 antibody

Copyright © NSJ Bioreagents. All rights reserved.