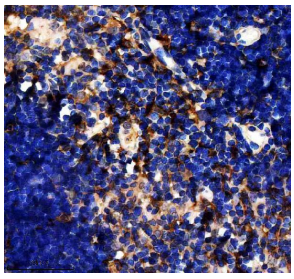
EFHD2 Antibody / EF-hand domain-containing protein D2 Antibody (FY13590)

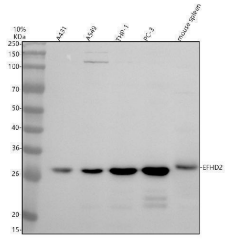
Catalog No.	Formulation	Size
FY13590	0.5mg/ml if reconstituted with 0.2ml sterile DI water	100 ug

Bulk quote request

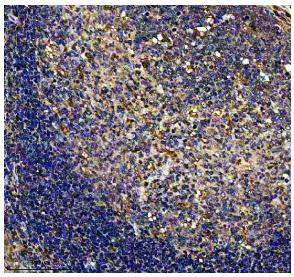
Species Reactivity	Human, Mouse, Rat
Format	Antigen affinity purified
Host	Rabbit
Clonality	Polyclonal (rabbit origin)
Isotype	Rabbit Ig
Buffer	Each vial contains 4 mg Trehalose, 0.9 mg NaCl, 0.2 mg Na2HPO4.
UniProt	Q96C19
Applications	Western blot: 0.5-1ug/ml Immunohistochemistry (FFPE): 2-5ug/ml Immunoprecipitation: 2ug per 500ug of lysate ELISA: 0.1-0.5 ug/ml
Limitations	This EFHD2 Antibody / EF-hand domain-containing protein D2 Antibody is supplied exclusively for research use.



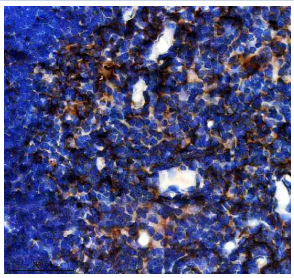
EFHD2 Antibody by IHC in mouse thymus. Immunohistochemistry of formalin-fixed, paraffin-embedded mouse thymus using EF-hand domain-containing protein D2 Antibody shows brown staining among cells in the thymic tissue, contrasting with hematoxylin-stained nuclei. Heat-induced antigen retrieval was performed in EDTA buffer at pH 8.0, followed by blocking with 10% goat serum. Sections were incubated with primary antibody at 2 ug/mL overnight at 4oC. HRP-conjugated secondary antibody and DAB chromogen generated brown immunoreactivity, with hematoxylin counterstaining highlighting nuclei.



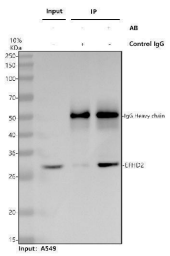
EFHD2 Antibody by WB in human cell lines and mouse spleen. Western blot analysis using EF-hand domain-containing protein D2 Antibody detects a prominent band near 27 kDa, compared with the calculated molecular weight of approximately 27 kDa. Lanes 1-4 contain A431, A549, THP-1 and PC-3 whole-cell lysates; lane 5 contains mouse spleen lysate. Reduced lysates containing 30 ug total protein per lane were separated by 10% SDS-PAGE and transferred to nitrocellulose. After blocking with 5% nonfat milk, the membrane was incubated with primary antibody at 0.5 ug/mL overnight at 4oC. Detection employed an HRP-conjugated anti-rabbit secondary antibody and chemiluminescent substrate.



EFHD2 Antibody by IHC in human tonsil. Immunohistochemistry of formalin-fixed, paraffin-embedded human tonsil using EF-hand domain-containing protein D2 Antibody shows brown staining in portions of the lymphoid tissue, with heterogeneous signal across the section. Heat-induced antigen retrieval was performed in EDTA buffer at pH 8.0, followed by blocking with 10% goat serum. Sections were incubated with primary antibody at 2 ug/mL overnight at 4oC. HRP-conjugated secondary antibody and DAB chromogen generated brown immunoreactivity, with hematoxylin counterstaining highlighting nuclei.



EFHD2 Antibody by IHC in rat thymus. Immunohistochemistry of formalin-fixed, paraffin-embedded rat thymus using EF-hand domain-containing protein D2 Antibody shows brown immunoreactivity within thymic tissue against a blue nuclear counterstain. Heat-induced antigen retrieval was performed in EDTA buffer at pH 8.0, followed by blocking with 10% goat serum. Sections were incubated with primary antibody at 2 ug/mL overnight at 4oC. HRP-conjugated secondary antibody and DAB chromogen generated brown immunoreactivity, with hematoxylin counterstaining highlighting nuclei.



EFHD2 Antibody by IP in A549 cells. Immunoprecipitation of EF-hand domain-containing protein D2 Antibody-associated material from A549 whole-cell lysate was assessed by Western blot. The input lysate is shown in lane 1, a rabbit IgG control immunoprecipitate in lane 2, and the specific antibody immunoprecipitate in lane 3. A band near 27 kDa is visible in the input and antibody-enriched material, consistent with the expected EFHD2 molecular weight. The approximately 50 kDa signal in immunoprecipitation lanes corresponds to immunoglobulin heavy chain. The assay used 2 ug immunoprecipitating antibody and 500 ug lysate.

Description

EFHD2 Antibody / EF-hand domain-containing protein D2 Antibody detects EFHD2, also called swiprosin-1, a calcium-binding protein associated with the actin cytoskeleton. The protein contains EF-hand motifs and regions that support interactions with cytoskeletal components. EFHD2 has been implicated in the organization of actin filaments and in the coupling of intracellular calcium signals to changes in cell structure. Its functions have been investigated in immune cells, neurons, and other cell types in which cytoskeletal remodeling is essential for specialized activity.

Actin dynamics are regulated by networks of proteins that promote filament assembly, stabilization, bundling, and disassembly. EFHD2 has been described as an actin-associated protein whose behavior can be influenced by calcium availability. In immune cells, studies have connected EFHD2 with signaling events and the reorganization of cellular structures during activation. In the nervous system, EFHD2 has been examined in relation to neuronal morphology and protein aggregation. These findings reflect multiple biological settings rather than a single universal signaling mechanism. The EF-hand domain-containing protein D2 Antibody name refers to this same gene product.

EFHD2 has received attention in neurodegenerative disease research because it has been detected in association with pathological protein assemblies in some studies. Its relationship to tau-related pathology and other aggregation

processes remains an active area of investigation, and association alone does not demonstrate causation. EFHD2 also illustrates how calcium-sensitive proteins can participate in structural rather than purely enzymatic functions. NSJ Bioreagents includes EFHD2 among targets connected to cytoskeletal regulation, calcium-dependent interactions, and neuronal cell biology. An EFHD2 Antibody provides a way to investigate the molecular biology associated with this protein.

Explore related research targets in our Immunology Antibodies collection.

Application Notes

Working dilutions of the EFHD2 Antibody / EF-hand domain-containing protein D2 Antibody may require optimization according to the experimental protocol.

Immunogen

The EFHD2 Antibody was generated using e. coli-derived human EFHD2 recombinant protein (amino acids M1-K240).

Storage

Once reconstituted, refrigerate the EFHD2 Antibody at 4oC for no longer than one month. For extended storage, freeze aliquots at -20oC for up to six months and avoid repeated freeze-thaw cycles.

Alternate Names

EFHD2 antibody, EF-hand domain-containing protein D2 antibody, EF-hand domain family member D2 antibody, Swiprosin 1 antibody, Swiprosin-1 antibody, SWS1 antibody

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