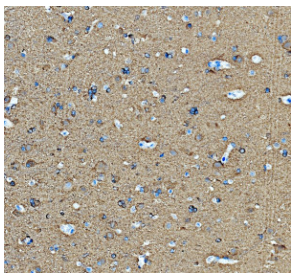
DPYSL5 Antibody / CRMP5 Polyclonal Antibody (FY13509)

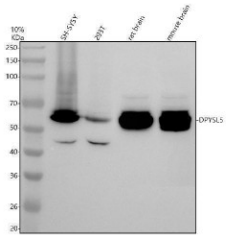
Catalog No.	Formulation	Size
FY13509	Adding 0.2 ml of distilled water will yield a concentration of 500 ug/ml	100 ug

Bulk quote request

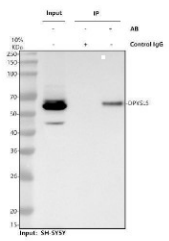
Species Reactivity	Human, Mouse, Rat
Format	Lyophilized
Host	Rabbit
Clonality	Polyclonal (rabbit origin)
Isotype	Rabbit IgG
Purity	Antigen Affinity
Buffer	Each vial contains 4mg Trehalose, 0.9mg NaCl, 0.2mg Na2HPO4
UniProt	Q9BPU6
Applications	Western Blot: 0.5-1ug/ml Immunohistochemistry (FFPE): 2-5ug/ml ELISA: 0.1-0.5ug/ml Flow cytometry: 1-3ug/million cells Immunoprecipitation: 0.5-2ug per 500ug of lysate
Limitations	This DPYSL5 Antibody / CRMP5 Polyclonal Antibody is available for research use only.



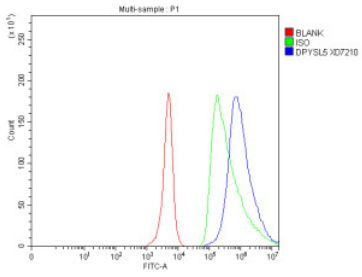
DPYSL5 Antibody by IHC in Human Brain Immunohistochemistry of paraffin-embedded human brain sections using DPYSL5 Antibody. The CRMP5 Polyclonal Antibody produces prominent cytoplasmic staining within neuronal cells and surrounding neuropil, with comparatively limited nuclear labeling. The staining distribution is consistent with the cytoplasmic localization and neuronal association of DPYSL5/CRMP5. Heat-mediated antigen retrieval was performed using EDTA buffer at pH 8.0 prior to antibody incubation.



DPYSL5 Antibody by WB in Human Cells and Rodent Brain Western blot testing of human SH-SY5Y whole cell lysate (lane 1), human 293T whole cell lysate (lane 2), rat brain lysate (lane 3) and mouse brain lysate (lane 4) with DPYSL5 Antibody. A strong band is detected at approximately 61 kDa in all four samples, consistent with the calculated molecular weight of DPYSL5/CRMP5. Weaker lower molecular weight bands are visible in the human cell lysates and may represent degradation products, processed forms or nonspecific reactivity. The dominant target-sized signal produced by this CRMP5 Polyclonal Antibody is particularly clean in the rodent brain samples.



DPYSL5 Antibody by IP in SH-SY5Y Cells Immunoprecipitation of DPYSL5 from SH-SY5Y whole cell lysate using DPYSL5 Antibody. Lane 1 contains input lysate, lane 2 represents precipitation with rabbit control IgG, and lane 3 represents immunoprecipitation with the CRMP5 Polyclonal Antibody. A distinct DPYSL5/CRMP5 band is detected at approximately 61 kDa in the input and antibody-immunoprecipitated samples, while essentially no corresponding signal is observed with control IgG, supporting specific enrichment of the target protein.



DPYSL5 Antibody by Flow Cytometry in SH-SY5Y Cells Flow cytometry analysis of fixed and permeabilized SH-SY5Y cells using DPYSL5 Antibody. Cells stained with the CRMP5 Polyclonal Antibody (blue) show a clear rightward fluorescence shift relative to the rabbit IgG isotype control (green) and unstained blank control (red), demonstrating intracellular detection of DPYSL5/CRMP5. Cells were fixed with 4% paraformaldehyde and permeabilized before antibody staining. This validation applies to fixed-cell intracellular flow cytometry rather than live-cell surface staining.

Description

DPYSL5 Antibody recognizes dihydropyrimidinase like 5 (DPYSL5), a member of the collapsin response mediator protein (CRMP) family of cytosolic phosphoproteins. DPYSL5 is also widely known as CRMP5 and has been referred to as CRMP-5, DRP5 and ULIP6. CRMP proteins participate in neuronal differentiation, axonal guidance and cytoskeletal regulation by integrating extracellular guidance signals with intracellular mechanisms that control neuronal morphology. DPYSL5 is therefore of interest in studies of nervous system development, neuronal signaling and mechanisms governing neurite growth and organization.

DPYSL5 shares structural and functional characteristics with other members of the CRMP family but exhibits a distinct expression profile and biological activities. CRMP proteins can interact with cytoskeletal components and signaling proteins that regulate microtubule dynamics, actin organization and growth cone behavior. Through these pathways, DPYSL5 may contribute to the establishment and maintenance of neuronal architecture. A CRMP5 Polyclonal Antibody can therefore support investigation of CRMP5 expression and its relationship to neuronal differentiation, migration and cytoskeletal remodeling.

DPYSL5 has also attracted interest in cancer-associated neurological research. CRMP5 can function as an onconeural antigen, and autoantibodies recognizing CRMP5 have been identified in subsets of patients with paraneoplastic neurological syndromes associated with malignancy. These immune responses have linked CRMP5 to research involving tumor-associated autoimmunity and neurological dysfunction. DPYSL5 expression and immune recognition are consequently studied in the broader context of neurobiology, cancer biology and mechanisms connecting malignancy with nervous system disease.

At the molecular level, DPYSL5 is a cytoplasmic protein with a predicted molecular mass of approximately 61 kDa. Alternative splicing has been reported for the DPYSL5 gene, although characterized transcript variants can encode the same protein product. The relationship between DPYSL5 and other CRMP family members makes careful experimental

characterization important when studying CRMP-associated pathways. NSJ Bioreagents provides this CRMP5 Polyclonal Antibody for research examining DPYSL5 protein expression and function.

An DPYSL5 Antibody can be used to investigate CRMP5 in studies of neuronal development, cytoskeletal regulation, nervous system signaling and cancer-associated neurological biology.

Explore additional reagents for nervous system research in our Neuroscience Antibodies collection.

Application Notes

Optimal dilution of the DPYSL5 Antibody / CRMP5 Polyclonal Antibody should be determined by the researcher.

Immunogen

E.coli-derived human Dihydropyrimidinase-related protein 5 recombinant protein (amino acids G15-E506) was used as the immunogen for the DPYSL5 Antibody

Storage

After reconstitution, the DPYSL5 Antibody can be stored for up to one month at 4oC. For long-term, aliquot and store at -20oC. Avoid repeated freezing and thawing.

Alternate Names

CRMP5 antibody, Collapsin Response Mediator Protein 5 antibody, Dihydropyrimidinase Related Protein 5 antibody, Dihydropyrimidinase Like 5 antibody, DRP5 antibody, ULIP6 antibody

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