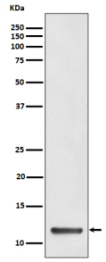
DYNLT1 Antibody / TCTEX1 [clone 30D84] (FY12554)

Catalog No.	Formulation	Size
FY12554	Rabbit IgG in phosphate buffered saline, pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol, 0.4-0.5mg/ml BSA	100 ul

Recombinant RABBIT MONOCLONAL

Bulk quote request

Availability	2-3 weeks
Species Reactivity	Human, Mouse
Format	Liquid
Host	Rabbit
Clonality	Recombinant Rabbit Monoclonal
Isotype	Rabbit IgG
Clone Name	30D84
Purity	Affinity-chromatography
Buffer	Rabbit IgG in phosphate buffered saline, pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol, 0.4-0.5mg/ml BSA.
UniProt	P63172
Applications	Western blot: 1:500-1:2000 Immunohistochemistry: 1:50-1:200 Immunocytochemistry/Immunofluorescence: 1:50-1:200 Immunoprecipitation: 1:50
Limitations	This DYNLT1 antibody is available for research use only.



Western blot analysis of TCTEX1 expression in human HeLa cell lysate. Predicted molecular weight ~12 kDa.

Description

DYNLT1 antibody detects dynein light chain Tctex type 1, a component of the cytoplasmic dynein complex encoded by the DYNLT1 gene. Cytoplasmic dynein is a multisubunit motor protein responsible for retrograde transport along microtubules. The Tctex type light chains, including DYNLT1, provide cargo binding specificity and regulatory interactions that guide dynein mediated transport of vesicles, organelles, and signaling proteins. Through these functions, DYNLT1 contributes to intracellular trafficking, neuronal transport, and cell cycle regulation.

DYNLT1 antibody is widely used in cell biology, neuroscience, and developmental research. In neurons, DYNLT1 mediates retrograde transport of signaling endosomes, mitochondria, and synaptic vesicles. This process is essential for synaptic maintenance, neuronal survival, and communication between axons and cell bodies. Disruption of DYNLT1 impairs axonal transport and has been linked to neurodevelopmental and neurodegenerative diseases. By detecting DYNLT1, researchers can evaluate the molecular basis of dynein cargo interactions and their impact on neuronal function.

Western blot assays reveal DYNLT1 protein bands in cell lysates and neuronal extracts. Immunohistochemistry maps DYNLT1 expression in brain and spinal cord tissues, while immunofluorescence highlights punctate localization consistent with vesicular transport complexes. These methods make DYNLT1 antibody a versatile tool for analyzing retrograde trafficking pathways.

DYNLT1 also plays roles in viral infection, where it is hijacked by pathogens to facilitate retrograde transport of viral components. Additionally, DYNLT1 has been implicated in mitotic spindle positioning, apoptosis regulation, and intracellular signaling. By applying DYNLT1 antibody, scientists can investigate how dynein light chain proteins integrate diverse cellular processes through transport regulation.

DYNLT1 antibody from NSJ Bioreagents delivers strong specificity for studying dynein mediated transport, neuronal signaling, and disease related processes. Its proven performance across methods ensures reliable detection in both basic and translational research.

Application Notes

Optimal dilution of the DYNLT1 antibody should be determined by the researcher.

Immunogen

A synthesized peptide derived from human TCTEX1 was used as the immunogen for the DYNLT1 antibody.

Storage

Store the DYNLT1 antibody at -20oC.

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