DTNBP1 Antibody / Dysbindin (FY12830)

Catalog No.	Formulation	Size
FY12830	Adding 0.2 ml of distilled water will yield a concentration of 500 ug/ml	100 ug

Bulk quote request

Availability	1-2 days
Species Reactivity	Human, Mouse, Rat
Format	Lyophilized
Clonality	Polyclonal (rabbit origin)
Isotype	Rabbit IgG
Purity	Immunogen affinity purified
Buffer	Each vial contains 4 mg Trehalose, 0.9 mg NaCl, 0.2 mg Na2HPO4.
UniProt	Q96EV8
Applications	Western Blot : 0.25-0.5ug/ml Flow Cytometry : 1-3ug/million cells ELISA : 0.1-0.5ug/ml
Limitations	This DTNBP1 antibody is available for research use only.

Description

DTNBP1 antibody detects Dystrobrevin-binding protein 1 (commonly known as Dysbindin), a cytoplasmic protein involved in vesicle trafficking, synaptic function, and organelle biogenesis. Encoded by the DTNBP1 gene on chromosome 6p22.3, this protein is a core component of the biogenesis of lysosome-related organelles complex 1 (BLOC-1). Through its scaffolding and trafficking functions, Dysbindin regulates endosomal transport, melanosome formation, and neurotransmitter release, particularly within neuronal and pigment cells.

Dysbindin interacts with other BLOC-1 subunits, including SNAPIN, MUTED, and BLOC1S proteins, coordinating actin-based vesicular transport. In neurons, it contributes to synaptic vesicle recycling and glutamatergic signaling, influencing synaptic plasticity and cognitive processes. Dysbindin localizes to endosomes and synaptic vesicles, reflecting its role in membrane trafficking and receptor recycling.

The DTNBP1 antibody is widely used in neuroscience, cell biology, and genetic disease research to examine endosomal transport, synaptic vesicle dynamics, and intracellular trafficking. Western blot analysis identifies a 40 kilodalton band corresponding to Dysbindin, while immunofluorescence shows punctate cytoplasmic staining consistent with endosomal localization. This antibody supports investigations into molecular mechanisms of vesicle regulation and

neurotransmission.

Loss-of-function mutations or reduced expression of DTNBP1 have been associated with Hermansky-Pudlak syndrome type 7 and susceptibility to schizophrenia, linking Dysbindin to synaptic homeostasis and neurodevelopment. Dysbindin also influences muscle membrane stability by binding to dystrobrevins. The DTNBP1 antibody provides a dependable reagent for exploring vesicle trafficking, neurological function, and genetic disorders. NSJ Bioreagents validates this antibody for western blotting, immunohistochemistry, and immunofluorescence, ensuring reproducible detection in cellular and neurological research.

Application Notes

Optimal dilution of the DTNBP1 antibody should be determined by the researcher.

Immunogen

E.coli-derived human Dysbindin/DTNBP1 recombinant protein (Position: M1-S351) was used as the immunogen for the DTNBP1 antibody.

Storage

After reconstitution, the DTNBP1 antibody can be stored for up to one month at 4oC. For long-term, aliquot and store at -20oC. Avoid repeated freezing and thawing.