

## DTBP1 Rabbit pAb

CatalogNo: YT6988

### | Key Features

#### Host Species

- Rabbit

#### Reactivity

- Human, Mouse, Rat

#### Applications

- WB

#### MW

- 39kD (Calculated)

#### Isotype

- IgG

### | Recommended Dilution Ratios

WB 1:500-2000

### | Storage

**Storage\*** -15°C to -25°C/1 year (Do not lower than -25°C)

**Formulation** Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.

### | Basic Information

**Clonality** Polyclonal

### | Immunogen Information

**Immunogen** Synthesized peptide derived from human DTBP1 AA range: 56-106

**Specificity** This antibody detects endogenous levels of DTBP1 at Human/Mouse/Rat

### | Target Information

**Gene name** DTNBP1 My031

Protein Name

DTBP1

| Organism | Gene ID                  | UniProt ID               |
|----------|--------------------------|--------------------------|
| Human    | <a href="#">84062</a> ;  | <a href="#">Q96EV8</a> ; |
| Mouse    | <a href="#">94245</a> ;  | <a href="#">Q91WZ8</a> ; |
| Rat      | <a href="#">641528</a> ; | <a href="#">Q5M834</a> ; |

Cellular Localization

[Isoform 1]: Cytoplasm . Cytoplasmic vesicle membrane ; Peripheral membrane protein ; Cytoplasmic side . Endosome membrane ; Peripheral membrane protein ; Cytoplasmic side . Melanosome membrane ; Peripheral membrane protein ; Cytoplasmic side . Cell junction, synapse, postsynaptic density . Endoplasmic reticulum . Nucleus . Mainly cytoplasmic but shuttles between the cytoplasm and nucleus. Exported out of the nucleus via its NES in a XPO1-dependent manner. Nuclear localization is required for regulation of the expression of genes such as SYN1. Detected in neuron cell bodies, axons and dendrites. Mainly located to the postsynaptic density. Detected at tubulovesicular elements in the vicinity of the Golgi apparatus and of melanosomes. Occasionally detected at the membrane of pigmented melanosomes in cultured melanoma cells. The BLOC-1 complex associates with the BLOC-2 complex in early endosome-associated tubules.; [Isoform 2]: Cytoplasm . Cytoplasmic vesicle membrane ; Peripheral membrane protein ; Cytoplasmic side . Cytoplasmic vesicle, secretory vesicle, synaptic vesicle membrane ; Peripheral membrane protein ; Cytoplasmic side . Endosome membrane ; Peripheral membrane protein ; Cytoplasmic side . Melanosome membrane ; Peripheral membrane protein ; Cytoplasmic side . Cell junction, synapse, postsynaptic cell membrane . Endoplasmic reticulum . Nucleus . Shuttles between the cytoplasm and nucleus. Exported out of the nucleus via its NES in a XPO1-dependent manner. Nuclear localization is required for regulation of the expression of genes such as SYN1. Mainly expressed in the dendritic spine. Predominantly a synaptic vesicle isoform but also highly expressed in the nucleus. The BLOC-1 complex associates with the BLOC-2 complex in early endosome-associated tubules. Associated with the AP-3 complex at presynaptic terminals.; [Isoform 3]: Cytoplasm . Cytoplasmic vesicle membrane ; Peripheral membrane protein ; Cytoplasmic side . Cytoplasmic vesicle, secretory vesicle, synaptic vesicle membrane ; Peripheral membrane protein ; Cytoplasmic side . Endosome membrane ; Peripheral membrane protein ; Cytoplasmic side . Melanosome membrane ; Peripheral membrane protein ; Cytoplasmic side . Cell junction, synapse, postsynaptic cell membrane . Endoplasmic reticulum . Exclusivley cytoplasmic. Predominantly found in the postsynaptic density (PSD). Little association with synaptic vesicles. The BLOC-1 complex associates with the BLOC-2 complex in early endosome-associated tubules. Associated with the AP-3 complex at presynaptic terminals.

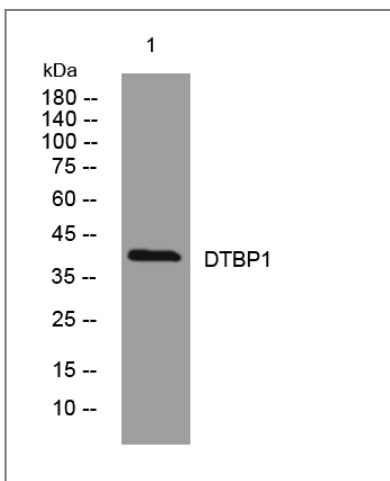
Tissue specificity

Detected in brain, in neurons and in neuropil. Isoform 1 is expressed in the cerebral cortex, and hippocampal frontal (HF). Specific expression in the posterior half of the superior temporal gyrus (pSTG). Higher expression of isoform 2 and 3 in the HF than in the pSTG while isoform 1 shows no difference in expression in these areas. In the HF, detected in dentate gyrus (DG) and in pyramidal cells of hippocampus CA2 and CA3 (at protein level). Expressed in all principal neuronal populations of the HF, namely pyramidal neurons in the subiculum and CA1-3, granule cells in the dense cell layer of the DG (DGg), and polymorph cells in the hilus of the DG (DGh). Maximal levels in CA2, CA3, and DGh. Isoform 2 not expressed in the cerebral cortex.

## Function

Caution: The sequence shown here is derived from an Ensembl automatic analysis pipeline and should be considered as preliminary data. Disease: Defects in DTNBP1 are the cause of Hermansky-Pudlak syndrome type 7 (HPS7) [MIM:203300]. Hermansky-Pudlak syndrome (HPS) is a genetically heterogeneous, rare, autosomal recessive disorder characterized by oculocutaneous albinism, bleeding due to platelet storage pool deficiency, and lysosomal storage defects. This syndrome results from defects of diverse cytoplasmic organelles including melanosomes, platelet dense granules and lysosomes. Ceroid storage in the lungs is associated with pulmonary fibrosis, a common cause of premature death in individuals with HPS. Function: Plays a role in the biogenesis of lysosome-related organelles such as platelet dense granule and melanosomes. Similarity: Belongs to the dysbindin family. Subcellular location: Associated with endosomes, pre-synaptic vesicle membranes and microtubules. Subunit: Part of the biogenesis of lysosome-related organelles complex 1 (BLOC-1). Interacts with PLDN, SNAPIN and MUTED. Binds to DTNA and DTNB but may not be a physiological binding partner.

## Validation Data



Western blot analysis of lysates from MCF-7 cells, primary antibody was diluted at 1:1000, 4° over night

## Contact information

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