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eIF2B1 Rabbit pAb

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Catalog # AP55614

Product Information

Application	WB
Primary Accession	Q14232
Reactivity	Mouse
Predicted	Human, Rat, Chicken, Dog, Pig, Horse, Rabbit, Sheep
Host	Rabbit
Clonality	Polyclonal
Calculated MW	33712
Physical State	Liquid
Immunogen	KLH conjugated synthetic peptide derived from human eIF2B1
Epitope Specificity	51-150/305
Isotype	IgG
Purity	affinity purified by Protein A
Buffer	0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol.
SUBCELLULAR LOCATION	Plasma membrane
SIMILARITY	Belongs to the eIF-2B alpha/beta/delta subunits
SUBUNIT	Complex of five different subunits; alpha, beta, gamma, delta and epsilon.
DISEASE	Leukodystrophy with vanishing white matter (VWM) [MIM:603896]: A leukodystrophy that occurs mainly in children. Neurological signs include progressive cerebellar ataxia, spasticity, inconstant optic atrophy and relatively preserved mental abilities. The disease is chronic-progressive with, in most individuals, additional episodes of rapid deterioration following febrile infections or minor head trauma. While childhood onset is the most common form of the disorder, some severe forms are apparent at birth. A severe, early-onset form seen among the Cree and Chippewayan populations of Quebec and Manitoba is called Cree leukoencephalopathy. Milder forms may not become evident until adolescence or adulthood. Some females with milder forms of the disease who survive to adolescence exhibit ovarian dysfunction. This variant of the disorder is called ovarioleukodystrophy. Note=The disease is caused by mutations affecting the gene represented in this entry.
Important Note	This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.
Background Descriptions	This gene encodes one of five subunits of eukaryotic translation initiation factor 2B (EIF2B), a GTP exchange factor for eukaryotic initiation factor 2 and an essential regulator for protein synthesis. Mutations in this gene and the genes encoding other EIF2B subunits have been associated with leukoencephalopathy with vanishing white matter. [provided by RefSeq, Oct 2009]

Additional Information

Gene ID	1967
Other Names	Translation initiation factor eIF2B subunit alpha, eIF2B GDP-GTP exchange factor subunit alpha, EIF2B1, EIF2BA
Dilution	WB=1:500-2000
Storage	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.

Protein Information

Name	EIF2B1
Synonyms	EIF2BA
Function	Acts as a component of the translation initiation factor 2B (eIF2B) complex, which catalyzes the exchange of GDP for GTP on eukaryotic initiation factor 2 (eIF2) gamma subunit (PubMed:25858979, PubMed:27023709, PubMed:31048492). Its guanine nucleotide exchange factor activity is repressed when bound to eIF2 complex phosphorylated on the alpha subunit, thereby limiting the amount of methionyl- initiator methionine tRNA available to the ribosome and consequently global translation is repressed (PubMed:25858979, PubMed:31048492).
Cellular Location	Cytoplasm, cytosol {ECO:0000250|UniProtKB:Q9USP0}

Background

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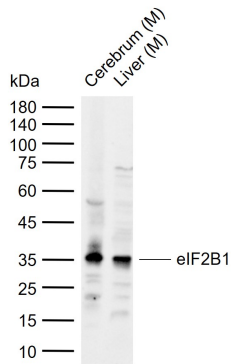
Images



Sample:
Lane 1: Mouse Cerebrum tissue lysates
Lane 2: Mouse Liver tissue lysates
Primary: Anti-eIF2B1 (AP55614) at 1/1000 dilution
Secondary: IRDye800CW Goat Anti-Rabbit IgG at 1/20000 dilution
Predicted band size: 34 kDa
Observed band size: 35 kDa