



NCAM-L1 Rabbit mAb

Catalog No	YP-rAb-16996
Isotype	IgG
Reactivity	Human,Mouse,Rat
Applications	WB,IHC,IF,IP,ELISA
Gene Name	L1CAM
Protein Name	Neural cell adhesion molecule L1
Purification Process	Protein A
Specificity	Endogenous
Formulation	PBS, 50% glycerol, 0.05% Proclin 300, 0.05%BSA
Source	Monoclonal, Rabbit,IgG
Dilution	IHC 1:200-1:1000; WB 1:500-1:2000; IF 1:200-1:1000; ELISA 1:5000-1:20000; IP 1:50-1:200; Note: For IHC, we suggest antigen retrieval with TE buffer pH 9.0
Concentration	0.5 mg/ml
Purity	≥90%
Storage Stability	-15 ° C to -25 ° C/1 year(Do not lower than -25 ° C)
Synonyms	NCAM-L1;Neural cell adhesion molecule L1;L1CAM ; CAML1 ; MIC5 ; Neural cell adhesion molecule L1 ; N-CAM-L1 ; NCAM-L1 ; CD antigen CD171;L1CAM
Observed Band	250kD
Calculated Molecular Weight	140kD
Cell Pathway	Cell membrane ; Single-pass type I membrane protein . Cell projection, growth cone . Cell projection, axon . Cell projection, dendrite. Colocalized with SHTN1 in close apposition with actin filaments in filopodia and lamellipodia of axonalne growth cones of hippocampal neurons (By similarity). In neurons, detected predominantly in axons and cell body, weak localization to dendrites (PubMed:20621658). .
Tissue Specificity	Epithelium,Fetal brain,Liver,Pancreas,Plasma,
Function	Disease:Defects in L1CAM are a cause of partial agenesis of the corpus callosum [MIM:304100]; a X-linked disorder.,Disease:Defects in L1CAM are the cause of hydrocephalus due to stenosis of the aqueduct of Sylvius (HSAS) [MIM:307000]. Hydrocephalus is a condition in which abnormal accumulation of cerebrospinal fluid in the brain causes increased intracranial pressure inside the skull. This is usually due to blockage of cerebrospinal fluid outflow in the brain ventricles or in the subarachnoid space at the base of the brain. In children is typically characterized by enlargement of the head, prominence of the forehead, brain



atrophy, mental deterioration, and convulsions. In adults the syndrome includes incontinence, imbalance, and dementia. HSAS is characterized by mental retardation and enlarged brain ventricles. Disease: Defects in L1CAM are the cause of mental retardation-aphasia-shuffling gait-adducted thumbs syndrome (MASA) [MIM:303350]; also known as corpus callosum hypoplasia, psychomotor retardation, adducted thumbs, spastic paraparesis, and hydrocephalus or CRASH syndrome. MASA is an X-linked recessive syndrome with a highly variable clinical spectrum. Main clinical features include spasticity and hyperreflexia of lower limbs, shuffling gait, mental retardation, aphasia and adducted thumbs. The features of spasticity have been referred to as complicated spastic paraplegia type 1 (SPG1). Some patients manifest corpus callosum hypoplasia and hydrocephalus. Inter- and intrafamilial variability is very wide, such that patients with hydrocephalus, MASA, SPG1, and agenesis of corpus callosum can be present within the same family. Disease: Defects in L1CAM are the cause of spastic paraplegia X-linked type 1 (SPG1) [MIM:303350]. Spastic paraplegia is a degenerative spinal cord disorder characterized by a slow, gradual, progressive weakness and spasticity of the lower limbs. Disease: Defects in L1CAM may contribute to Hirschsprung disease (HSCR) [MIM:142623]. It may do so by modifying the effects of a Hirschsprung disease-associated gene to cause intestinal aganglionosis. Function: Cell adhesion molecule with an important role in the development of the nervous system. Involved in neuron-neuron adhesion, neurite fasciculation, outgrowth of neurites, etc. Binds to axonin on neurons. online information: L1CAM mutation Web Page, similarity: Belongs to the immunoglobulin superfamily. L1/neurofascin/NgCAM family. similarity: Contains 5 fibronectin type-III domains. similarity: Contains 6 Ig-like C2-type (immunoglobulin-like) domains.

Background

The protein encoded by this gene is an axonal glycoprotein belonging to the immunoglobulin supergene family. The ectodomain, consisting of several immunoglobulin-like domains and fibronectin-like repeats (type III), is linked via a single transmembrane sequence to a conserved cytoplasmic domain. This cell adhesion molecule plays an important role in nervous system development, including neuronal migration and differentiation. Mutations in the gene cause X-linked neurological syndromes known as CRASH (corpus callosum hypoplasia, retardation, aphasia, spastic paraplegia and hydrocephalus). Alternative splicing of this gene results in multiple transcript variants, some of which include an alternate exon that is considered to be specific to neurons. [provided by RefSeq, May 2013],

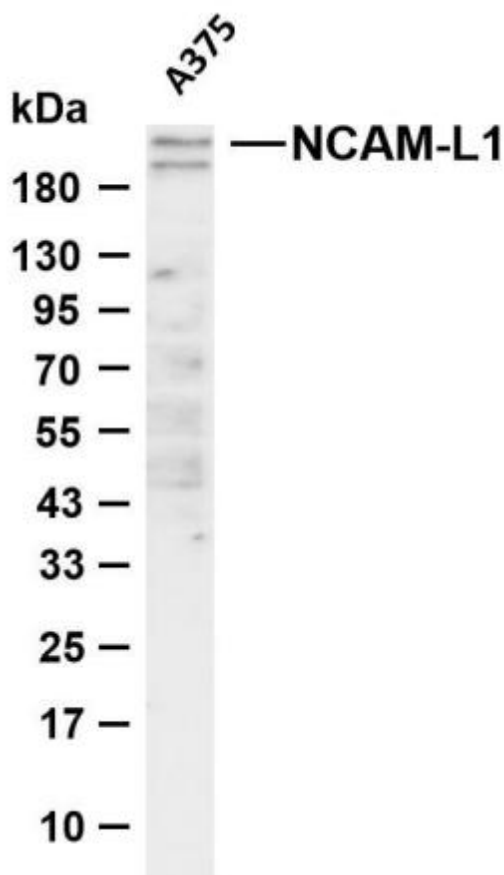
matters needing attention

Avoid repeated freezing and thawing!

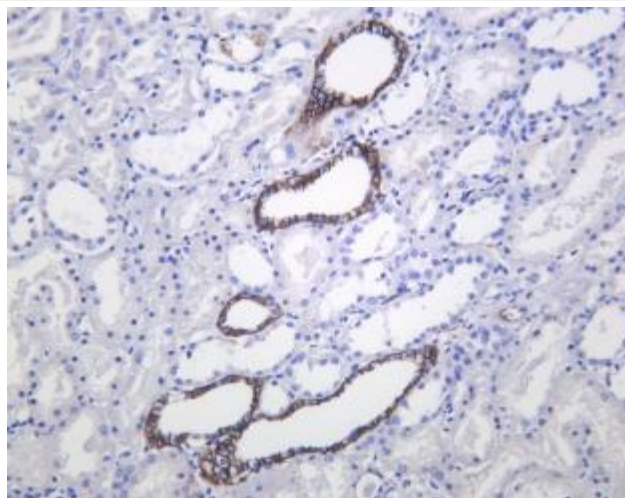
Usage suggestions

This product can be used in immunological reaction related experiments. For more information, please consult technical personnel.





Various whole cell lysates were separated by 4-20% SDS-PAGE, and the membrane was blotted with anti-NCAM-L1 antibody. The HRP-conjugated Goat anti-Rabbit IgG (H + L) antibody was used to detect the antibody. Lane 1: A375 Predicted band size: 140kDa Observed band size: 250kDa



Human kidney was stained with anti-NCAM-L1 Rabbit antibody

