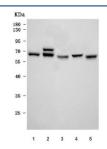


# Kinesin light chain 1 Antibody / KLC1 [clone 4F2D7] (RQ7365)

Catalog No.	Formulation	Size
RQ7365	0.5mg/ml if reconstituted with 0.2ml sterile DI water	100 ug

### **Bulk quote request**

Availability	1-3 business days
Species Reactivity	Human, Mouse, Rat
Format	Antigen affinity purified
Clonality	Monoclonal (mouse origin)
Isotype	Mouse IgG2b
Clone Name	4F2D7
Purity	Antigen affinity purified
Buffer	Lyophilized from 1X PBS with 2% Trehalose
UniProt	Q07866
Applications	Western Blot : 0.5-1ug/ml
Limitations	This Kinesin light chain 1 antibody is available for research use only.



Western blot testing of 1) human HeLa, 2) human U-87 MG, 3) rat brain, 4) rat C6 and 5) mouse brain tissue lysate with Kinesin light chain 1 antibody. Predicted molecular weight: 63-72 kDa (multiple isoforms).

## **Description**

Kinesin light chain 1 is a protein that in humans is encoded by the KLC1 gene. Conventional kinesin is a tetrameric molecule composed of two heavy chains and two light chains, and transports various cargos along microtubules toward their plus ends. The heavy chains provide the motor activity, while the light chains bind to various cargos. This gene encodes a member of the kinesin light chain family. It associates with kinesin heavy chain through an N-terminal domain, and six tetratricopeptide repeat (TPR) motifs are thought to be involved in binding of cargos such as vesicles, mitochondria, and the Golgi complex. Thus, kinesin light chains function as adapter molecules and not motors per se. Although previously named kinesin 2, this gene is not a member of the kinesin-2 / kinesin heavy chain subfamily of

kinesin motor proteins. Extensive alternative splicing produces isoforms with different C-termini that are proposed to bind to different cargos; however, the full-length nature and/or biological validity of most of these variants have not been determined.

#### **Application Notes**

Optimal dilution of the KLC1 antibody should be determined by the researcher.

#### **Immunogen**

Recombinant human protein (amino acids M1-D537) was used as the immunogen for the Kinesin light chain 1 antibody.

#### **Storage**

After reconstitution, the KLC1 antibody can be stored for up to one month at 4oC. For long-term, aliquot and store at -20oC. Avoid repeated freezing and thawing.