

Recombinant Human KLC1 protein, His & T7-tagged

Cat. No. KLC1-7881H **Lot. No.** (See product label)

SPECIFICATION

Product Overview	Recombinant Human KLC1 aa. (Met1~Val254 (Accession # Q07866)) fused with N-terminal His & T7 tag was produced in E. coli cells.
Species	Human
Source	E.coli
ProteinLength	Met1~Val254
Description	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.
Form	Freeze-dried powder
Molecular Mass	40kDa as determined by SDS-PAGE reducing conditions.

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Endotoxin	<1.0EU per 1ug (determined by the LAL method)
Purity	>95%
Characteristic	The isoelectric point is 4.9.
Applications	SDS-PAGE; WB; ELISA; IP.
Stability	The thermal stability is described by the loss rate of the target protein. The loss rate was determined by accelerated thermal degradation test, that is, incubate the protein at 37°C for 48h, and no obvious degradation and precipitation were observed. (Referring from China Biological Products Standard, which was calculated by the Arrhenius equation.) The loss of this protein is less than 5% within the expiration date under appropriate storage condition.
Storage	Avoid repeated freeze/thaw cycles. Store at 2-8°C for one month. Aliquot and store at -80°C for 12 months.
Storage Buffer	Supplied as lyophilized form in PBS, pH7.4, containing 5% trehalose, 0.01% sarcosyl.
Reconstitution	Reconstitute in sterile PBS, pH7.2-pH7.4.
GENE INFORMATION	
Gene Name	KLC1 kinesin light chain 1 [Homo sapiens (human)]
Official Symbol	KLC1
Synonyms	KLC1; kinesin light chain 1; KLC; KNS2; KNS2A; kinesin 2 60/70kDa; medulloblastoma antigen MU-MB-2.50

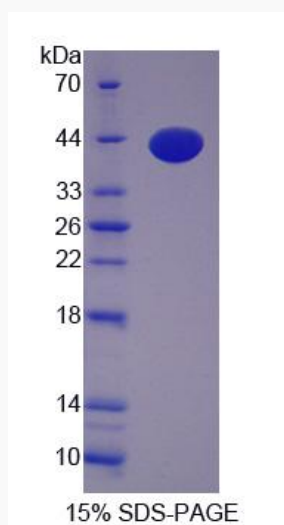
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Gene ID	3831
mRNA Refseq	NM_001130107.1
Protein Refseq	NP_001123579.1
UniProt ID	Q07866

SDS-PAGE



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