

SUN1 Antibody

Rabbit mAb Catalog # AP91946

Product Information

Application	WB, IHC, IF, FC, ICC, IHF
Primary Accession	<u>O94901</u>
Reactivity	Human
Clonality	Monoclonal
Other Names	Sun1; UNC84A;
lsotype	Rabbit IgG
Host	Rabbit
Calculated MW	87110

Additional Information

Dilution Purification Immunogen	WB 1:500~1:2000 IHC 1:50~1:200 ICC/IF 1:50~1:200 FC 1:50 Affinity-chromatography A synthesized peptide derived from human SUN1
Description Storage Condition and Buffer	Component of SUN-protein-containing multivariate complexes also called LINC complexes which link the nucleoskeleton and cytoskeleton by providing versatile outer nuclear membrane attachment sites for cytoskeletal filaments. Rabbit IgG in phosphate buffered saline , pH 7.4, 150mM NaCl, 0.02% sodium
	azide and 50% glycerol. Store at +4°C short term. Store at -20°C long term. Avoid freeze / thaw cycle.

Protein Information

Name	SUN1 (<u>HGNC:18587</u>)
Synonyms	KIAA0810, UNC84A
Function	As a component of the LINC (LInker of Nucleoskeleton and Cytoskeleton) complex involved in the connection between the nuclear lamina and the cytoskeleton (PubMed: <u>18039933</u> , PubMed: <u>18396275</u>). The nucleocytoplasmic interactions established by the LINC complex play an important role in the transmission of mechanical forces across the nuclear envelope and in nuclear movement and positioning (By similarity). Required for interkinetic nuclear migration (INM) and essential for nucleokinesis and centrosome-nucleus coupling during radial neuronal migration in the cerebral cortex and during glial migration (By similarity). Involved in telomere attachment to nuclear envelope in the prophase of meiosis implicating a SUN1/2:KASH5 LINC complex in which SUN1 and SUN2 seem to act at least partial redundantly (By similarity). Required for gametogenesis and involved in selective gene expression of coding and non-coding RNAs needed for gametogenesis (By similarity). Helps to define the distribution of nuclear pore complexes (NPCs)

(By similarity). Required for efficient localization of SYNE4 in the nuclear envelope (By similarity). May be involved in nuclear remodeling during sperm head formation in spermatogenesis (By similarity). May play a role in DNA repair by suppressing non- homologous end joining repair to facilitate the repair of DNA cross- links (PubMed:<u>24375709</u>).
 Cellular Location Nucleus inner membrane; Single-pass type II membrane protein. Note=At oocyte MI stage localized around the spindle, at MII stage localized to the spindle poles {ECO:0000250|UniProtKB:Q9D666}

Images



Western blot analysis of SUN1 expression in Ramos cell lysate.

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