

Recombinant Anti-SUN1 Rabbit mAb

Catalog # AP95266

Product Information

Application	WB, IHC, FC, IF/IC
Primary Accession	O94901
Reactivity	Human
Host	Rabbit
Clonality	Monoclonal
Calculated MW	87110

Additional Information

Gene ID	23353
Other Names	KIAA0810; UNC84A; SUN domain-containing protein 1; Protein unc-84 homolog A; Sad1/unc-84 protein-like 1
Target/Specificity	KLH-conjugated synthetic peptide encompassing a sequence within human SUN1 protein. The exact sequence is proprietary.
Dilution	WB~~WB (1/500 - 1/1000) IHC~~1:100~500 FC~~1:10~50 IF/IC~~N/A
Format	Liquid in PBS, pH 7.3, 50% glycerol, 0.05% BSA, and 0.05% Proclin300.
Storage	Store at -20 °C.Stable for 12 months from date of receipt

Protein Information

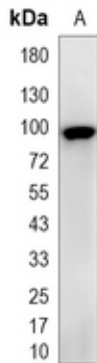
Name	SUN1 (HGNC:18587)
Synonyms	KIAA0810, UNC84A
Function	As a component of the LINC (Linker of Nucleoskeleton and Cytoskeleton) complex involved in the connection between the nuclear lamina and the cytoskeleton (PubMed:18039933, PubMed:18396275). The nucleocytoplasmic interactions established by the 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:[24375709](#)).

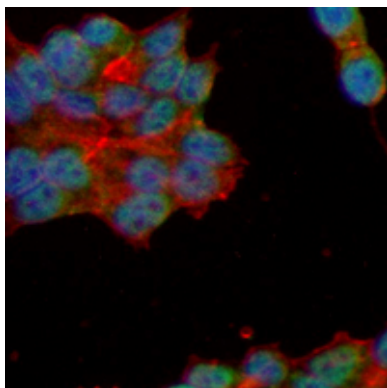
Cellular Location

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 (A) whole cell lysates. (Predicted band size: 87 kD; Observed band size: 98 kD)



Immunofluorescent analysis of SUN1 staining in Ramos cells. Formalin-fixed cells were permeabilized with 0.1% Triton X-100 in TBS for 5-10 minutes and blocked with 3% BSA-PBS for 30 minutes at room temperature. Cells were probed with the primary antibody in 3% BSA-PBS and incubated overnight at 4 °C in a humidified chamber. Cells were washed with PBST and incubated with an AF488-conjugated secondary antibody (green) in PBS at room temperature in the dark. Phalloidin - AF594 was used to stain Actin filaments (red). DAPI was used to stain the cell nuclei (blue).

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