ARG45217
anti-SUN2 antibody

Package: 50 µg
Store at: -20°C

Summary

Product Description	Rabbit Polyclonal antibody recognizes SUN2
Tested Reactivity	Hu
Tested Application	ICC/IF, IHC-P, WB
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Target Name	SUN2
Species	Human
Immunogen	Recombinant protein containing to human SUN2.
Conjugation	Un-conjugated
Alternate Names	SUN2; Sad1 And UNC84 Domain Containing 2; UNC84B; SUN Domain-Containing Protein 2; Sad1/Unc-84 Protein-Like 2; Protein Unc-84 Homolog B; Rab5-Interacting Protein; Rab5IP; Unc-84 Homolog B (C. Elegans); Sad1 Unc-84 Domain Protein 2; Nuclear Envelope Protein; Unc-84 Homolog B; KIAA0668; RAB5IP; FRIGG

Application Instructions

Application table

Application	Dilution
ICC/IF	5 µg/ml
IHC-P	2-5 µg/ml
WB	0.25-0.5 µg/ml

Application Note	* The dilutions indicate recommended starting dilutions and the optimal dilutions or concentrations should be determined by the scientist.
Observed Size	80 kDa

Properties

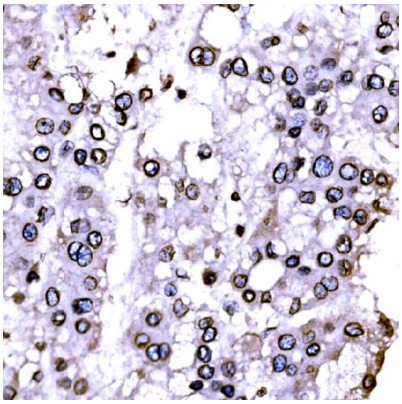
Form	Liquid
Purification	Affinity purification with immunogen.
Buffer	0.2% Na2HPO4, 0.9% NaCl and 4% Trehalose.
Stabilizer	4% Trehalose
Concentration	0.5 mg/ml
Storage instruction	For continuous use, store undiluted antibody at 2-8°C for up to a week. For long-term storage, aliquot and store at -20°C or below. Storage in frost free freezers is not recommended. Avoid repeated freeze/thaw cycles. Suggest spin the vial prior to opening. The antibody solution should be gently mixed

	before use.
Note	For laboratory research only, not for drug, diagnostic or other use.

Bioinformation

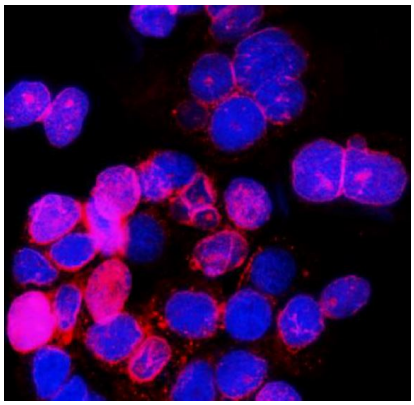
Gene Symbol	SUN2
Gene Full Name	Sad1 And UNC84 Domain Containing 2
Background	SUN1 (MIM 607723) and SUN2 are inner nuclear membrane (INM) proteins that play a major role in nuclear-cytoplasmic connection by formation of a 'bridge' across the nuclear envelope, known as the LINC complex, via interaction with the conserved luminal KASH domain of nesprins (e.g., SYNE1; MIM 608441) located in the outer nuclear membrane (ONM). The LINC complex provides a direct connection between the nuclear lamina and the cytoskeleton, which contributes to nuclear positioning and cellular rigidity (summary by Haque et al., 2010 [PubMed 19933576]).[supplied by OMIM, Nov 2010]
Function	As a component of the LINC (LInker of Nucleoskeleton and Cytoskeleton) complex, involved in the connection between the nuclear lamina and the cytoskeleton. 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. Specifically, SYNE2 and SUN2 assemble in arrays of transmembrane actin-associated nuclear (TAN) lines which are bound to F-actin cables and couple the nucleus to retrograde actin flow during actin-dependent nuclear movement. 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. Required for nuclear migration in retinal photoreceptor progenitors implicating association with cytoplasmic dynein-dynactin and kinesin motor complexes, and probably B-type lamins; SUN1 and SUN2 seem to act redundantly. The SUN1/2:KASH5 LINC complex couples telomeres to microtubules during meiosis; SUN1 and SUN2 seem to act at least partial redundantly. Anchors chromosome movement in the prophase of meiosis and is involved in selective gene expression of coding and non-coding RNAs needed for gametogenesis. Required for telomere attachment to nuclear envelope and gametogenesis. May also function on endocytic vesicles as a receptor for RAB5-GDP and participate in the activation of RAB5.. [UniProt]
Calculated Mw	80 kDa
PTM	Disulfide bond; Glycoprotein; Phosphoprotein. [UniProt]
Cellular Localization	Endosome; Membrane; Nucleus [UniProt]

Images



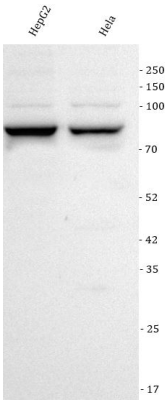
ARG45217 anti-SUN2 antibody IHC-P image

Immunohistochemistry: Human liver cancer stained with ARG45217 anti-SUN2 antibody at 2 µg/ml dilution.



ARG45217 anti-SUN2 antibody ICC/IF image

Immunofluorescence: A431 stained with ARG45217 anti-SUN2 antibody at 5 ug/ml dilution.



ARG45217 anti-SUN2 antibody WB image

Western blot: HepG2 and Hela stained with ARG45217 anti-SUN2 antibody at 0.5 µg/ml dilution.