ARG63104
anti-STIM1 antibody [CDN3H4]

Package: 100 µg, 50 µg
Store at: -20°C

Summary

Product Description	Mouse Monoclonal antibody [CDN3H4] recognizes STIM1
Tested Reactivity	Hu, Ms, Rat
Tested Application	ICC/IF, IHC-P, IP, WB
Specificity	The clone CDN3H4 reacts with human and rodent STIM1, a 84 kDa essential and conserved regulator of store-operated Ca2+ channel function.
Host	Mouse
Clonality	Monoclonal
Clone	CDN3H4
Isotype	IgG1
Target Name	STIM1
Immunogen	Synthetized peptide (C-terminal cytoplasmic part of STIM1).
Conjugation	Un-conjugated
Alternate Names	GOK; D11S4896E; Stromal interaction molecule 1; STRMK; TAM; TAM1; IMD10

Application Instructions

Application table	Application	Dilution
	ICC/IF	Assay-dependent
	IHC-P	5 µg/ml
	IP	Assay-dependent
	WB	1 µg/ml

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Application Note	WB: Sample preparation: Resuspend approx. 50 mil. cells in 1 ml cold Lysis buffer (1% laurylmaltoside in 20 mM Tris/Cl, 100 mM NaCl pH 8.2, 50 mM NaF including Protease inhibitor Cocktail). Incubate 60 min on ice. Centrifuge to remove cell debris. Mix lysate with non-reducing/reducing Laemmli SDS-PAGE sample buffer. Application note: Both reducing and non-reducing condition. ICC/IF: Staining technique: Methanol-aceton fixation. * The dilutions indicate recommended starting dilutions and the optimal dilutions or concentrations should be determined by the scientist.
Positive Control	WB: RBL rat basophilic leukemia cell line ICC/IF: HeLa

Properties

Form	Liquid
Purification	Purified from hybridoma culture supernatant by protein-A affinity chromatography.
Purity	> 95% (by SDS-PAGE)

Buffer	PBS (pH 7.4) and 15 mM Sodium azide
Preservative	15 mM Sodium azide
Concentration	1 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

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Gene Symbol	STIM1
Gene Full Name	stromal interaction molecule 1
Background	STIM1 (stromal interacting molecule; also known as GOK) acts as a sensor of calcium depletion within the endoplasmic reticulum and transduces the signal to Orai1, the presumptive CRAC channel at the plasma membrane. Following decrease of luminal calcium concentration, STIM1 oligomerizes and induces Orai1 to enable entry of extracellular calcium into the cytoplasm. However, the precise mechanism of STIM1-Orai1 interaction has not been elucidated yet. Many questions also remain to be solved around STIM1 functional distribution. It turns out that STIM1 associates with growing ends of microtubules and is involved in endoplasmic reticulum tubule extension.
Function	Plays a role in mediating store-operated Ca(2+) entry (SOCE), a Ca(2+) influx following depletion of intracellular Ca(2+) stores. Acts as Ca(2+) sensor in the endoplasmic reticulum via its EF-hand domain. Upon Ca(2+) depletion, translocates from the endoplasmic reticulum to the plasma membrane where it activates the Ca(2+) release-activated Ca(2+) (CRAC) channel subunit, TMEM142A/ORAI1. [UniProt]
Research Area	Metabolism antibody; Signaling Transduction antibody
Calculated Mw	77 kDa
PTM	Glycosylation is required for cell surface expression. Phosphorylated predominantly on Ser residues.

Images
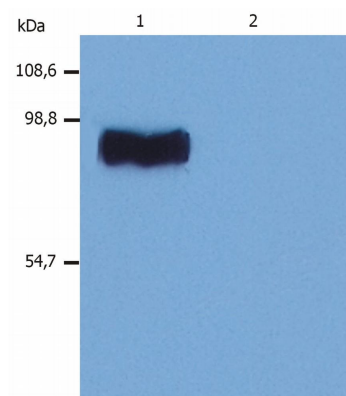
ARG63104 anti-STIM1 antibody [CDN3H4] WB image

Western blot: RBL rat basophilic leukemia cell lysate stained with ARG63104 anti-STIM1 antibody [CDN3H4].

Lane 2 was stained with Isotype mouse IgG1 control.
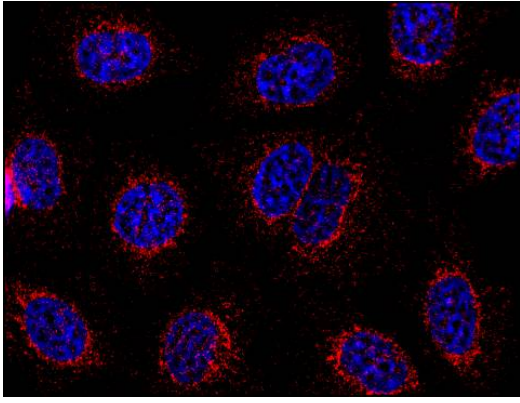
ARG63104 anti-STIM1 antibody [CDN3H4] ICC/IF image

Immunofluorescence: methanol-acetone fixed HeLa cells stained with ARG63104 anti-STIM1 antibody [CDN3H4] followed by incubation with Goat anti-mouse IgG1 Alexa Fluor® 598 (red) Nuclei were stained with DAPI (blue).

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