ARG63022
anti-H-Ras antibody [H-RAS-03]

Package: 100 µg
Store at: -20°C

Summary

Product Description	Mouse Monoclonal antibody [H-RAS-03] recognizes H-Ras
Tested Reactivity	Hu
Tested Application	WB
Specificity	The clone H-RAS-03 reacts with human H-Ras, an ubiquitously expressed 21 kDa intracellular protein. Although reactivity with other species has not been determined, it is probable as the epitope is highly conserved among animals.
Host	Mouse
Clonality	Monoclonal
Clone	H-RAS-03
Isotype	IgG1
Target Name	H-Ras
Species	Human
Immunogen	Peptide corresponding to amino acids DIHQYREQIKRVKDSDDC of human H-Ras protein
Conjugation	Un-conjugated
Alternate Names	GTPase HRas; C-H-RAS; RASH1; C-HA-RAS1; C-BAS/HAS; HAMSV; Transforming protein p21; H-RASIDX; Ha-Ras; p21ras; CTLO; c-H-ras; H-Ras-1; HRAS1

Application Instructions

Application table

Application	Dilution
WB	0.5 - 1 µg/ml

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 reducing Laemmli SDS-PAGE sample buffer. Boil for 5 min. Application note: Reducing condition.
* The dilutions indicate recommended starting dilutions and the optimal dilutions or concentrations should be determined by the scientist.

Positive Control: Raji, HeLa and K567

Properties

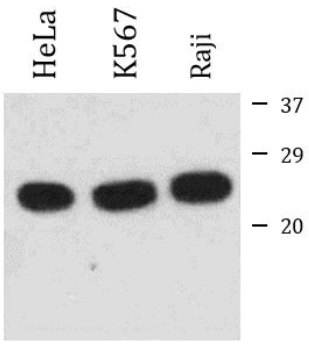
Form	Liquid
Purification	Purified from ascites by protein-A affinity chromatography.
Purity	> 95% (by SDS-PAGE)
Buffer	PBS (pH 7.4) and 15 mM Sodium azide
Preservative	15 mM Sodium azide

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

Database links	GeneID: 3265 Human Swiss-port # P01112 Human
Gene Symbol	HRAS
Gene Full Name	Harvey rat sarcoma viral oncogene homolog
Background	H-Ras is one of three ubiquitously isoforms of Ras GTPase that operate at the intracellular leaflet of the plasma membrane to regulate multiple signal transduction pathways, such as mitogen-activated protein kinase (MAPK) cascade. H Ras is anchored to the plasma membrane by farnesyl and two palmityl residues. GTP loading decreases H-Ras affinity for lipid rafts and allows the protein to target to nonraft microdomains, the primary sites of H-Ras signaling. Sos protein and other guanine nucleotide-exchange factors catalyze dissociation of GDP from Ras. Besides its roles in the plasma membrane, active H-Ras also diffuses through the cytoplasm on nanoparticles termed rasosomes, which is dependent on Ras palmitoylation.
Function	Ras proteins bind GDP/GTP and possess intrinsic GTPase activity. [UniProt]
Research Area	Cancer antibody; Cell Biology and Cellular Response antibody; Cell Death antibody; Gene Regulation antibody; Signaling Transduction antibody
Calculated Mw	21 kDa
PTM	Palmitoylated by the ZDHHC9-GOLGA7 complex. A continuous cycle of de- and re-palmitoylation regulates rapid exchange between plasma membrane and Golgi. S-nitrosylated; critical for redox regulation. Important for stimulating guanine nucleotide exchange. No structural perturbation on nitrosylation. The covalent modification of cysteine by 15-deoxy-Delta12,14-prostaglandin-J2 is autocatalytic and reversible. It may occur as an alternative to other cysteine modifications, such as S-nitrosylation and S-palmitoylation. Acetylation at Lys-104 prevents interaction with guanine nucleotide exchange factors (GEFs).

Images



ARG63022 anti-H-Ras antibody [H-RAS-03] WB image

Western blot: HeLa, K567 and Raji whole cell lysates stained with ARG63022 anti-H-Ras antibody [H-RAS-03], in reducing conditions.