Human Ras Antibody

Monoclonal Rat IgG_{2B} Clone # 342404

Catalog Number: MAB3429

DESCRIPTION

Species Reactivity	Human
Specificity	Detects human Ras (H-Ras, N-Ras, and K-Ras) in Western blots. Does not detect more distantly related Ras superfamily members, including R-Ras, Ral, Rap, and Rheb.
Source	Monoclonal Rat IgG_{2B} Clone # 342404
Purification	Protein A or G purified from hybridoma culture supernatant
Immunogen	*E. coli*-derived recombinant human K-Ras2B Met1-Met188 (Gln61His) Accession # P01116-2
Formulation	Lyophilized from a 0.2 μm filtered solution in PBS with Trehalose. See Certificate of Analysis for details. *Small pack size (-SP) is supplied as a 0.2 μm filtered solution in PBS.

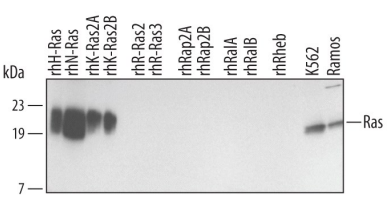
APPLICATIONS

Please Note: *Optimal dilutions should be determined by each laboratory for each application. General Protocols are available in the Technical Information section on our website.*

	Recommended Concentration	Sample
Western Blot	5 µg/mL	See Below

DATA

Western Blot



Detection of Human Ras by Western Blot. Western blot shows lysates of K562 human chronic myelogenous leukemia cell line and Ramos human Burkitt's lymphoma cell line. PVDF membrane was probed with 5 µg/mL Rat Anti-Human Ras Monoclonal Antibody (Catalog # MAB3429) followed by HRP-conjugated Anti-Rat IgG Secondary Antibody (Catalog # HAF005). For additional reference, recombinant human H-Ras, N Ras, K-Ras2A and 2B, R-Ras2 and 3, Rap2A and 2B, RalA and B, and Rheb (5 ng/lane) were included. A specific band for Ras was detected at approximately 21 kDa (as indicated). This experiment was conducted under reducing conditions and using Immunoblot Buffer Group 3.

PREPARATION AND STORAGE

Reconstitution	Reconstitute at 0.5 mg/mL in sterile PBS.
Shipping	The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature recommended below. *Small pack size (-SP) is shipped with polar packs. Upon receipt, store it immediately at -20 to -70 °C
Stability & Storage	**Use a manual defrost freezer and avoid repeated freeze-thaw cycles.** ● 12 months from date of receipt, -20 to -70 °C as supplied. ● 1 month, 2 to 8 °C under sterile conditions after reconstitution. ● 6 months, -20 to -70 °C under sterile conditions after reconstitution.

BACKGROUND

The Ras proteins (H-Ras, N-Ras, and two splice variants of K-Ras) define a closely related family of 21 kDa GTPases that cycle between GTP-bound active and GDP-bound inactive states at the cytoplasmic face of the plasma membrane. Receptor tyrosine kinases and G-protein coupled receptors activate Ras, and effectors include Raf and PI 3-kinase. Activating mutations of Ras, which impair GTPase activity and stabilize the active state, are found in nearly one-third of all human cancers.