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N-RAS Antibody

Catalog # ASC11665

Product Information

Application	WB, E
Primary Accession	P01111
Other Accession	NP_002515, 4505451
Reactivity	Human, Mouse, Rat
Host	Rabbit
Clonality	Polyclonal
Isotype	IgG
Calculated MW	21229
Concentration (mg/ml)	1 mg/mL
Conjugate	Unconjugated
Application Notes	N-RAS antibody can be used for detection of N-RAS by Western blot at 0.5 – 1 g/mL.

Additional Information

Gene ID	4893
Other Names	GTPase NRas, Transforming protein N-Ras, NRAS, HRAS1
Target/Specificity	NRAS; N-RAS antibody is predicted to not cross-react with H-RAS
Reconstitution & Storage	N-RAS antibody can be stored at 4℃ for three months and -20℃, stable for up to one year.
Precautions	N-RAS Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	NRAS
Synonyms	HRAS1
Function	Signal transducer in the Ras-MAPK signaling pathway that regulates cell proliferation and survival (PubMed:30712867). Ras proteins bind GDP/GTP and possess intrinsic GTPase activity (PubMed:30712867). Recognized by LZTR1 that mediates its ubiquitination by a BCR (BTB-CUL3-RBX1) E3 ubiquitin-protein ligase complex (PubMed:40934300).
Cellular Location	Cell membrane; Lipid-anchor; Cytoplasmic side. Golgi apparatus membrane; Lipid-anchor Note=Shuttles between the plasma membrane and the Golgi apparatus

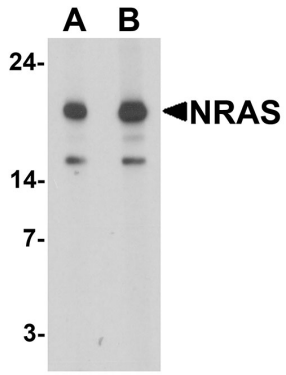
Background

N-RAS Antibody: Activating mutations and overexpression of classical Ras subfamily members (N-RAS, H-RAS, and K-RAS) have been widely investigated as key events in the development of human cancers. The N-RAS protein shuttles between the Golgi apparatus and the plasma membrane. This shuttling is regulated through palmitoylation and depalmitoylation by the ZDHHC9-GOLGA7 complex. N-RAS, which has intrinsic GTPase activity, is activated by a guanine nucleotide-exchange factor and inactivated by a GTPase activating protein. Mutations in this gene have been associated with somatic rectal cancer, follicular thyroid cancer, autoimmune lymphoproliferative syndrome, Noonan syndrome, and juvenile myelomonocytic leukemia.

References

Ehrhardt A, Ehrhardt GR, Guo X, et al. Ras and relatives--job sharing and networking keep an old family together. Exp. Hematol. 2002; 30:1089-106.
Swarthout JT, Lobo S, Farh L, et al. DHHC9 and GCP9 constitute a human protein fatty acyltransferase with specificity for H- and N-Ras. J. Biol. Chem. 2005; 280:31141-8.
Malaney S and Daly RJ. The ras signaling pathway in mammary tumorigenesis and metastasis. J. Mammary Gland Biol. Neoplasia 2001; 6:101-13.
Rodenhuis S. ras and human tumors. Semin Cancer Biol. 1992; 3:241-7

Images



Western blot analysis of N-RAS in 293 cell lysate with N-RAS antibody at (A) 1 and (B) 2 µg/mL.

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.