

**Mouse Anti-NRAS [MD65]: MC0460**

**Intended Use:** For Research Use Only

**Description:** This is an N-ras oncogene encoding a membrane protein that shuttles between the Golgi apparatus and the plasma membrane. This shuttling is regulated through palmitoylation and depalmitoylation by the ZDHHC9-GOLGA7 complex. The encoded protein, 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.

**Specifications**

Clone: MD65  
 Source: Mouse  
 Isotype: IgG1  
 Reactivity: Human  
 Localization: Membrane  
 Formulation: Antibody in PBS pH7.4, containing BSA and  $\leq 0.09\%$  sodium azide (NaN<sub>3</sub>)  
 Storage: Store at 2°- 8°C  
 Applications: IHC, IF, IP, WB  
 Package:

Description	Catalog No.	Size
NRAS Concentrated	MC0460	1 ml

**IHC Procedure\***

Positive Control Tissue: Colon Adenocarcinoma  
 Concentrated Dilution: 10-50  
 Pretreatment: Citrate pH6.0 or EDTA pH8.0, 15 minutes using Pressure Cooker, or 30-60 minutes using water bath at 95°-99°C  
 Incubation Time and Temp: Overnight @ 4°C  
 Detection: Refer to the detection system manual

\* Result should be confirmed by an established diagnostic procedure.

**References:**

1. Loss of miR-143 and miR-145 in condyloma acuminatum promotes cellular proliferation and inhibits apoptosis by targeting NRAS. Liu X, et al. R Soc Open Sci 5:172376, 2018.
2. Alternative Polyadenylation in Triple-Negative Breast Tumors Allows NRAS and c-JUN to Bypass PUMILIO Posttranscriptional Regulation. Miles WO, et al. Cancer Res 76:7231-7241, 2016.
3. BRAF(V600E) and NRAS(Q61L/Q61R) mutation analysis in metastatic melanoma using immunohistochemistry: a study of 754 cases highlighting potential pitfalls and guidelines for interpretation and reporting. Kakavand H, et al. Histopathology 69:680-6, 2016.
4. Immunohistochemical Detection of NRASQ61R Mutation in Diverse Tumor Types. Dias-Santagata D, et al. Am J Clin Pathol 145:29-34, 2016.
5. Impeded Nedd4-1-mediated Ras degradation underlies Ras-driven tumorigenesis. Zeng T, et al. Cell Rep 7:871-82 2014.
6. RAS/MEK-independent gene expression reveals BMP2-related malignant phenotypes in the Nf1-deficient MPNST. Sun D, et al. Mol Cancer Res 11:616-27, 2013.