

Product datasheet for CF505675

OriGene Technologies, Inc.

9620 Medical Center Drive, Ste 200 Rockville, MD 20850, US Phone: +1-888-267-4436 https://www.origene.com techsupport@origene.com EU: info-de@origene.com CN: techsupport@origene.cn

p21 Ras (HRAS) Mouse Monoclonal Antibody [Clone ID: OTI2A1]

Product data:

Product Type: Primary Antibodies

Clone Name: OTI2A1

Applications: IF, IHC, WB

Recommended Dilution: WB 1:400~4000, IHC 1:150, IF 1:100

Reactivity: Human, Dog, Mouse, Rat

Host: Mouse Isotype: IgG1

Clonality: Monoclonal

Immunogen: Full length human recombinant protein of human HRAS(NP_005334) produced in HEK293T

cell.

Formulation: Lyophilized powder (original buffer 1X PBS, pH 7.3, 8% trehalose)

Reconstitution Method: For reconstitution, we recommend adding 100uL distilled water to a final antibody

concentration of about 1 mg/mL. To use this carrier-free antibody for conjugation experiment, we strongly recommend performing another round of desalting process. (OriGene recommends Zeba Spin Desalting Columns, 7KMWCO from Thermo Scientific)

Purification: Purified from mouse ascites fluids or tissue culture supernatant by affinity chromatography

(protein A/G)

Conjugation: Unconjugated

Storage: Store at -20°C as received.

Stability: Stable for 12 months from date of receipt.

Predicted Protein Size: 21.1 kDa

Gene Name: HRas proto-oncogene, GTPase

Database Link: NP 005334

Entrez Gene 15461 MouseEntrez Gene 293621 RatEntrez Gene 403735 DogEntrez Gene 3265

<u>Human</u> <u>P01112</u>





Background:

This gene belongs to the Ras oncogene family, whose members are related to the transforming genes of mammalian sarcoma retroviruses. The products encoded by these genes function in signal transduction pathways. These proteins can bind GTP and GDP, and they have intrinsic GTPase activity. This protein undergoes a continuous cycle of de- and repalmitoylation, which regulates its rapid exchange between the plasma membrane and the Golgi apparatus. Mutations in this gene cause Costello syndrome, a disease characterized by increased growth at the prenatal stage, growth deficiency at the postnatal stage, predisposition to tumor formation, mental retardation, skin and musculoskeletal abnormalities, distinctive facial appearance and cardiovascular abnormalities. Defects in this gene are implicated in a variety of cancers, including bladder cancer, follicular thyroid cancer, and oral squamous cell carcinoma. Multiple transcript variants, which encode different isoforms, have been identified for this gene. [provided by RefSeq, Jul 2008]

Synonyms:

C-BAS/HAS; C-H-RAS; C-HA-RAS1; CTLO; H-RASIDX; HAMSV; HRAS1; p21ras; RASH1

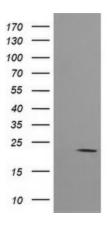
Protein Families:

Druggable Genome

Protein Pathways:

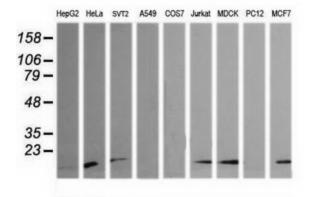
Acute myeloid leukemia, Axon guidance, B cell receptor signaling pathway, Bladder cancer, Chemokine signaling pathway, Chronic myeloid leukemia, Endocytosis, Endometrial cancer, ErbB signaling pathway, Fc epsilon RI signaling pathway, Focal adhesion, Gap junction, Glioma, GnRH signaling pathway, Insulin signaling pathway, Long-term depression, Long-term potentiation, MAPK signaling pathway, Melanogenesis, Melanoma, Natural killer cell mediated cytotoxicity, Neurotrophin signaling pathway, Non-small cell lung cancer, Pathways in cancer, Prostate cancer, Regulation of actin cytoskeleton, Renal cell carcinoma, T cell receptor signaling pathway, Thyroid cancer, Tight junction, VEGF signaling pathway

Product images:

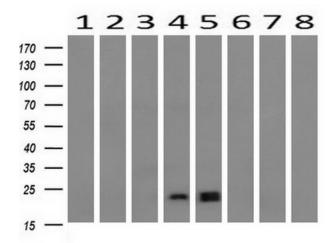


HEK293T cells were transfected with the pCMV6-ENTRY control (Left lane) or pCMV6-ENTRY HRAS ([RC216409], Right lane) cDNA for 48 hrs and lysed. Equivalent amounts of cell lysates (5 ug per lane) were separated by SDS-PAGE and immunoblotted with anti-HRAS. Positive lysates [LY401645] (100ug) and [LC401645] (20ug) can be purchased separately from OriGene.

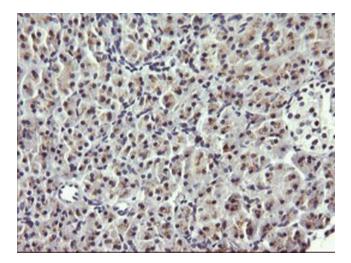




Western blot analysis of extracts (35ug) from 9 different cell lines by usin g anti-HRAS monoclonal antibody (HepG2: human; HeLa: human; SVT2: mouse; A549: human; COS7: monkey; Jurkat: human; MDCK: canine; PC12: rat; MCF7: human).

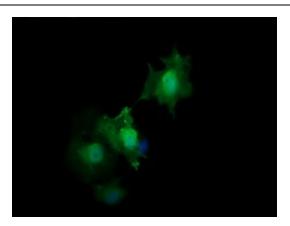


Western blot analysis of extracts (10ug) from 8 Human tissue by using anti-HRAS monoclonal antibody at 1:200 (1: Testis; 2: Uterus; 3: Breast; 4: Brain; 5: Liver; 6: Ovary; 7: Thyroid gland; 8: Colon).



Immunohistochemical staining of paraffinembedded Human pancreas tissue within the normal limits using anti-HRAS mouse monoclonal antibody. Heat-induced epitope retrieval by EDTA solution buffer pH 8.0 at 120°C for 3 min.





Anti-HRAS mouse monoclonal antibody ([TA505675]) immunofluorescent staining of COS7 cells transiently transfected by pCMV6-ENTRY HRAS ([RC216409]).