

**H-Ras (Q61L)**

Harvey rat sarcoma viral oncogene homolog
human, recombinant, *E. coli*

Cat. No.	Amount
PR-203	50 µg

For general laboratory use.

Shipping: shipped on dry ice

Storage Conditions: store at -80 °C

Additional Storage Conditions: avoid freeze/thaw cycles

Shelf Life: 12 months

Molecular Weight: 21.3 kDa (189 amino acids)

Accession number: NP_005334

Purity: > 90 % (SDS-PAGE)

Form: liquid (Supplied in 64 mM Tris-HCl pH 7.2, 10 mM MgCl₂ and 5 mM DTE)

Description:

Ras proteins are members of the superfamily of small GTP-binding proteins that function as molecular switches controlling a variety of signaling and transport pathways. H-Ras is one of the classic human Ras proteins (H-, N-, K-Ras4A, and K-Ras4B). The mutation Q61L results in a decreased GTPase activity as well as increased GDP/GTP exchange. This mutant constitutively activates the Ras-signaling pathway. Protein preparation is 77% GDP- and 23% GTP-loaded, measured by HPLC.

Selected References:

Sasazuki *et al.* (2005) Transformation by Oncogenic RAS Sensitizes Human Colon Cells to TRAIL-induced Apoptosis by Up-regulating Death Receptor 4 and Death Receptor 5 through a MEK-dependent Pathway. *J Biol. Chem.* **280**:22856.

Wittinghofer *et al.* (2000) Ras - a molecular switch involved in tumor formation. *Angew. Chem. Int. Ed.* **39**:4192.

Frech *et al.* (1994) Role of glutamine-61 in the hydrolysis of GTP by p21H-ras: an experimental and theoretical study. *Biochemistry* **33**:3237.