DATA SHEET

Jena Bioscience

H-Ras

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

Cat. No.	Amount
PR-107	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 25 mM HEPES pH 7.2, 40 mM NaCl, 3 mM DTT, 2 mM $MgCl_2$ and 0.01 mM GDP)

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). Suitable as a substrate for farnesyltransferase. Protein preparation is 98% GDP- and 2% GTP-loaded, measured by HPLC.

Activity:
GTPγS binding: >750 mmol/mol.

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.

Marshall (1995) Ras target proteins in eukaryotic cells. *FASEB J.* **9**:1311.

Reiss *et al.* (1990) Inhibition of purified p21ras farnesyl-protein transferase by Cys-aaX tetrapeptides. *Cell* **62**:81.

Chaussade *et al.* (2009) Functional differences between two classes of oncogenic mutation in the PIK3CA gene. *Biochemical and Biophysical Research Communications* **381 (4)**:577-581.