Recombinant Protein Technical Manual

Recombinant Human HRAS/GTPase Hras Protein (His Tag)

RPES3945

Product Data:

Product SKU: RPES3945

Size: 20µg

Species: Human

Expression host: Baculovirus-Insect Cells

Uniprot: P01112

Protein Information:

Molecular Mass: 22.4 kDa

AP Molecular Mass: 23 kDa

Tag: C-His

Bio-activity:

Purity: > 94 % as determined by reducing SDS-PAGE.

Endotoxin: < 1.0 EU per µg as determined by the LAL method.

Storage: Lyophilized proteins are stable for up to 12 months when stored at -20 to -80°C. Reconstituted protein solution can be stored at 4-8℃ for 2-7 days. Aliquots of reconstituted samples are stable at < -20℃ for 3 months.

Shipping: This product is provided as lyophilized powder which is shipped with ice packs.

Formulation: Lyophilized from sterile 50mM Tris, 100mM NaCl, pH 8.0, 10% gly

Reconstitution: Please refer to the printed manual for detailed information.

Application:

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

Immunogen Information:

Sequence: Met 1-Cys 186

Background:

HRas, also known as HRAS, belongs to the small GTPase superfamily, Ras family and is widely expressed. It functions in signal transduction pathways. HRas can bind GTP and GDP, and they have intrinsic GTPase activity. It undergoes a continuous cycle of de- and re-palmitoylation, which regulates its rapid exchange between the plasma membrane and the Golgi apparatus. Defects in HRAS are the cause of faciocutaneoskeletal syndrome (FCSS). FCSS is arare condition characterized by prenatally increased growth, postnatal growth deficiency, mental retardation, distinctive facial appearance, cardiovascular abnormalities, tumor predisposition, skin and musculoskeletal abnormalities. Defects in HRAS also can cause congenital myopathy with excess of muscle spindles. HRAS deficiency may be a cause of susceptibility to Hurthle cell thyroid carcinoma. It has been shown that defects in HRAS can cause susceptibility to bladder cancer which is a malignancy originating in tissues of the urinary bladder. It often presents with multiple tumors appearing at different times and at different sites in the bladder. Most bladder cancers are transitional cell carcinomas. They begin in cells that normally make up the inner lining of the bladder. Other types of bladder cancer include squamous cell carcinoma (cancer that begins in thin, flat cells) and adenocarcinoma (cancer that begins in cells that make and release mucus and other fluids). Bladder cancer is a complex disorder with both genetic and environmental influences. Defects in HRAS are the cause of oral squamous cell carcinoma.