



**Ral B. Recombinant Protein**  
RalB Recombinant G-Protein, G protein

**BACKGROUND**

RalB is a member of the Ras-like GTP binding protein family. Ras proteins provide a crucial link in the intracellular signalling cascades. Ras proteins are members of the small G protein family. These proteins are characterized by a molecular weight between 20 and 30 kDa, the ability to bind GTP or GDP and a low intrinsic GTPase activity. These proteins relay signals from the plasma membrane activated by receptor tyrosine kinases to the nucleus via a network of serine/threonine kinases. Ras proteins belong to a family of approximately 40 mammalian and 60 non-mammalian proteins. Ras proteins were first discovered as the hyperactive products of mutant Ras genes which promote cancer by disrupting the normal controls on cell proliferation and differentiation; about 30% of human cancers have mutations in a Ras gene. Ras and Ras-like proteins function as switches, cycling between 2 distinct conformational states, active when GTP is bound and inactive when GDP is bound. Affinity precipitation assays can be used to determine the activation status of Ras and Ras-like family members. This assay is based on the ability of the Ras family effector proteins to interact specifically with the activated GTP-bound form of their target GTPases.

**ACTIVITY**

Ral B protein is provided as a functional G-protein and can be used as a Western blot control for antibodies to Ral B protein or in assays to study to protein-protein interactions of Ral B and related proteins with regulatory proteins.

**PURITY**

**REFERENCES**

1. Zhao, Z. & Rivkees, S.A., Tissue-specific expression of GTPase RalA and RalB during embryogenesis and regulation by epithelial-mesenchymal interaction. *Mech. Dev.* 2000, 97, 201-204
2. Bhullar, R.P. & Yang, S., Immunodetection of ralA and ralB GTP-binding proteins in various rat tissues and platelets. *Mol. Cell Biochem.* 1998, 179, 49-55
3. Jilkina, O. & Bhullar, R.P., Generation of antibodies specific for the RalA and RalB GTP-binding proteins and determination of their concentration and distribution in human platelets. *Biochim. Biophys. Acta* 1996, 1314, 157-166

**ORDERING INFORMATION**

**CATALOG NUMBER**

X1211

**SIZE**

25 µg

**CUSTOMER STORAGE**

Product should be stored at -70°C.  
Aliquot to avoid freeze/thaw cycles

**FORMULATION**

Provided in 50mM Tris (pH 7.5) solution containing 150 mM NaCl, 10 mM MgCl<sub>2</sub>, 1 mM DTT, 10% glycerol

**SHIP CONDITIONS**

Ship on dry ice, freeze upon arrival

**STABILITY**

Products are stable for one year from purchase when stored properly

**CONCENTRATION**

See vial for concentration

**SOURCE**

Recombinant GST protein from E. Coli