

His-Ran T24N Mutant Protein

Dominant negative

Cat. # RN05

Upon arrival store at 4°C (desiccated)

See datasheet for storage after reconstitution

Material

The dominant negative form of the human Ran protein has been produced in a bacterial expression system. This protein has a threonine to asparagine substitution at amino acid 24 creating a dominant negative protein that is defective in GDP exchange. The recombinant protein contains six histidine residues at its amino terminus (His tag) and has an approximate molecular weight of its 35 kDa. His-Ran T24N protein is supplied as a white lyophilized powder.

Storage and Reconstitution

Briefly centrifuge to collect the product at the bottom of the tube. The protein should be reconstituted to 2 mg/ml by the addition of 5 μ l of Milli-Q water. When reconstituted, the protein will be in the following buffer: 25 mM Tris pH 7.5, 25 mM NaCl, 0.25 mM MgCl₂, 0.5% (w/v) dextran and 2.5% (w/v) sucrose. In order to maintain high biological activity of the protein, it is strongly recommended that the protein solution be supplemented with DTT to 1 mM final concentration, aliquoted into "experiment sized" amounts, snap frozen in liquid nitrogen and stored at -70°C. The protein is stable for 6 months if stored at -70°C. The protein should not be exposed to repeated freeze-thaw cycles. The lyophilized protein is stable at 4°C desiccated (<10% humidity) for 1 year.

Purity

Protein purity is determined by scanning densitometry of Coomassie Blue stained protein on a 12% polyacrylamide gel. His-Ran T24N protein was determined to be >95% pure (see Figure 1).

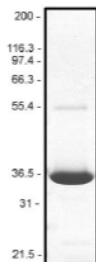


Figure 1. His-Ran T24N Protein Purity Determination. A 10 μ g sample of recombinant His-Ran T24N protein (molecular weight approx. 35 kDa) was separated by electrophoresis in a 12% SDS-PAGE system, and stained with Coomassie Blue. Protein quantitation was performed using the Precision Red Protein Assay Reagent (Cat. # ADV02). Mark12 molecular weight markers are from Invitrogen.

Product Uses

- Negative control for Ran activation studies.
- Study of Ran binding proteins

Product Citations/Related Products

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