

Ran (T24N)

human, recombinant, *E. coli*

| Cat. No. | Amount |
|----------|--------|
| PR-212 | 50 µg |

For *in vitro* use only
Quality guaranteed for 12 months
Store at -80°C

Avoid freeze / thaw cycles

Form

Liquid. Supplied as a 1 mg/ml solution in 20 mM $\text{KH}_2\text{PO}_4/\text{K}_2\text{HPO}_4$, pH 7.0, 6.5 mM DTE, 150 mM KCl, 5 mM MgCl_2 , and 10% glycerol.

Molecular weight

24.0 kDa (216 amino acids).

Purity

> 95% by SDS-PAGE.

Description

Ran (Ras-related nuclear protein, TC4) belongs to the superfamily of GTP binding proteins. It acts in cellular processes such as nuclear transport, mitotic spindle assembly, and post-mitotic nuclear assembly.

The mutation T24N results in no or little binding to GTP and is known to act as a negative inhibitor of nuclear import. Protein preparation is 18% GDP-loaded, measured by HPLC.

Selected References:

Dasso M (2002) The Ran GTPase: Theme and Variations. *Current Biology* **12**:502.

Renault *et al.* (2001) Structural Basis for Guanine Nucleotide Exchange on Ran by the regulator of Chromosome Condensation (RCC1). *Cell* **105**:245.

Sekimoto *et al.* (1996) Interferon-gamma-dependent nuclear import of Stat1 is mediated by the GTPase activity of Ran/TC4. *J. Biol. Chem.* **271**:31017.

Associated products available from Jena Bioscience

Non-hydrolyzable GTP-analogs (such as $\text{GTP}\gamma\text{S}$, GppCp, GppNHp, NPE-caged-GTP...)

Fluorescent GTPs (such as MANT, ANT, TNP, or GTP labeled with a dye of your choice)

Recombinant G-protein signaling reagents (including GAPs, GEFs, heterotrimeric G-proteins, and many more...)

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