



# **Ran (Androgen Receptor-associated Protein 24, ARA24, Gsp1, GTP Binding Nuclear Protein RAN, GTPase Ran, LPS, RAN Member RAS Oncogene Family, Ras-like Protein TC4, Ras-related Nuclear Protein, RASL2-8, TC4)**

## **Catalog number**

R1069-02

## **Supplier**

United States Biological

Ran is a small GTPase of the Ras family that plays a central role in the spacial and temporal organization of eukaryotic cells. During interphase, Ran-GDP localizes to the cytoplasm and Ran-GTP to the nucleus. This polarized localization of Ran ensures its role in nuclear transport. During mitosis, Ran-GTP is chromatin associated, where it promotes spindle assembly and nuclear envelope formation. In S phase, Ran-GTP associates with and inhibits MCM helicase, ensuring precise chromosomal DNA duplication during the cell cycle.

## **Applications**

Suitable for use in Western Blot. Other applications not tested.

## **Recommended Dilutions**

Western Blot: 1:1000. Incubate membrane with 1X TBS, 5% BSA, 0.1% Tween-20 at 4°C with gentle shaking overnight.

Optimal dilution determined by the researcher.

## **Storage and Stability**

May be stored at 4°C for short-term only. Aliquot to avoid repeated freezing and thawing. Store at -20°C. Aliquots are stable for 12 months. For maximum recovery of product, centrifuge the original vial after thawing and prior to removing the cap.

## **Immunogen**

Two synthetic peptides corresponding to amino acids surrounding Arg29 and Asn143 of human Ran. Species Sequence Homology: D. melanogaster and Xenopus, 100%

## **Formulation**

Supplied as a liquid in 10mM sodium HEPES, pH 7.5, 150mM sodium chloride, 0.1mg/ml BSA, 50% glycerol.

## **Purity**

Purified by Protein A and peptide affinity chromatography.

## **Specificity**

Recognizes endogenous levels of total human Ran protein. Does not crossreact with other small GTPases of the Ras family. Species Crossreactivity: mouse, rat, monkey, hamster and bovine

## **Product Type**



Pab

**Source**

human

**Isotype**

IgG

**Grade**

Affinity Purified

**Applications**

WB

**Crossreactivity**

Bo Hm Hu Mk Mo Rt

**Storage**

-20°C

**MW**

24

**Reference**

1. Quimby, B.B. and Dasso, M. (2003) Curr. Opin. Cell Biol. 15, 338-344. 2. Hetzer, M. et al. (2002) Nat. Cell Biol. 4, 177-184. 3. Yamaguchi, R. and Newport, J. (2003) Cell 113, 115-125.