abcam

Product datasheet

Anti-Ran antibody [EPR10791(B)] ab155103

Recombinant RabMAb

5 References 5 Images

Overview

Product name	Anti-Ran antibody [EPR10791(B)]
Description	Rabbit monoclonal [EPR10791(B)] to Ran
Host species	Rabbit
Tested applications	**Suitable for:** Flow Cyt (Intra), WB, IP, ICC/IF
Species reactivity	**Reacts with:** Mouse, Rat, Human
Immunogen	Synthetic peptide within Human Ran. The exact sequence is proprietary. Database link: **P62826** (Peptide available as **ab217263**)
Positive control	WB: HepG2, LoVo, Jurkat, HeLa, C6, Raw 264.7, PC-12, and NIH/3T3 whole cell lysates; IP: HeLa whole cell lysate; Flow Cyt (intra): HeLa cells; ICC/IF: HeLa cells.
General notes	This product is a recombinant monoclonal antibody, which offers several advantages including: - High batch-to-batch consistency and reproducibility - Improved sensitivity and specificity - Long-term security of supply - Animal-free production For more information **see here**. Our RabMAb® technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to **RabMAb® patents**.

Properties

Form	Liquid
Storage instructions	Shipped at 4°C. Store at +4°C short term (1-2 weeks). Upon delivery aliquot. Store at -20°C long term. Avoid freeze / thaw cycle.
Storage buffer	Preservative: 0.01% Sodium azide Constituents: 59% PBS, 40% Glycerol (glycerin, glycerine), 0.05% BSA
Purity	Protein A purified
Clonality	Monoclonal
Clone number	EPR10791(B)

Isotype	IgG

Applications

The Abpromise guarantee Our **Abpromise guarantee** covers the use of ab155103 in the following tested applications.

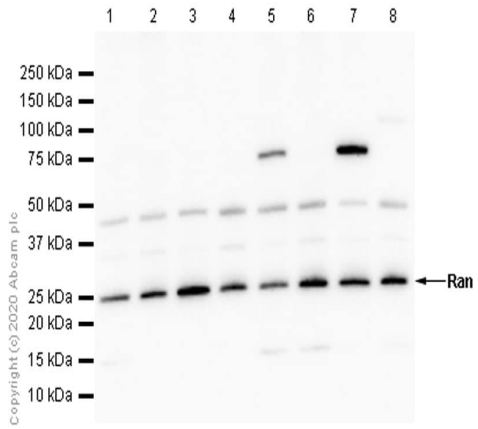
The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Application	Abreviews	Notes
Flow Cyt (Intra)		1/100. For unpurified use at 1/100 - 1/1000. **ab172730** - Rabbit monoclonal IgG, is suitable for use as an isotype control with this antibody.
WB		1/1000. Predicted molecular weight: 24 kDa. **For unpurified use at 1/1000 - 1/10000.**
IP		1/50. **For unpurified use at 1/10 - 1/100.**
ICC/IF		1/100. **For unpurified use at 1/250 - 1/500.**

Target

Function	GTP-binding protein involved in nucleocytoplasmic transport. Required for the import of protein into the nucleus and also for RNA export. Involved in chromatin condensation and control of cell cycle (By similarity). The complex with BIRC5/ survivin plays a role in mitotic spindle formation by serving as a physical scaffold to help deliver the RAN effector molecule TPX2 to microtubules. Enhances AR-mediated transactivation. Transactivation decreases as the poly-Gln length within AR increases.
Tissue specificity	Expressed in a variety of tissues.
Sequence similarities	Belongs to the small GTPase superfamily. Ran family.
Post-translational modifications	The N-terminus is blocked.
Cellular localization	Nucleus. Cytoplasm. Melanosome. Becomes dispersed throughout the cytoplasm during mitosis. Identified by mass spectrometry in melanosome fractions from stage I to stage IV.

Images



Western blot - Anti-Ran antibody [EPR10791(B)] (ab155103)

All lanes : Anti-Ran antibody [EPR10791(B)] (ab155103) at 1/1000 dilution (purified)

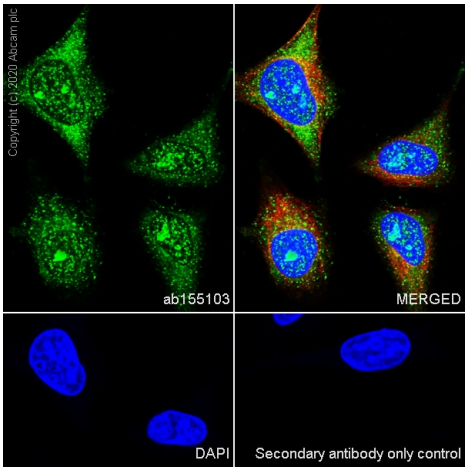
Lane 1 : HepG2 (Human hepatocellular carcinoma epithelial cell) whole cell lysate
Lane 2 : LoVo (Human colorectal adenocarcinoma epithelial cell) whole cell lysate
Lane 3 : Jurkat (Human T cell leukemia T lymphocyte) whole cell lysate
Lane 5 : C6 (Rat glial tumor glial cell) whole cell lysate
Lane 6 : Raw 264.7 (Mouse Abelson murine leukemia virus-induced tumor macrophage) whole cell lysate
Lane 7 : PC-12 (Rat adrenal gland pheochromocytoma) whole cell lysate
Lane 8 : NIH/3T3 (Mouse embryonic fibroblast) whole cell lysate

Lysates/proteins at 20 µg per lane.

Secondary
All lanes : Goat Anti-Rabbit IgG H&L (HRP) (**ab97051**) at 1/20000 dilution

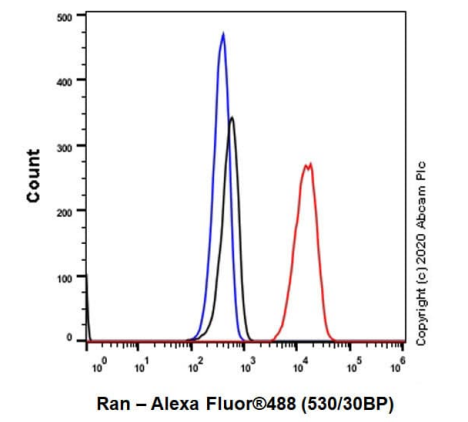
Predicted band size: 24 kDa
Observed band size: 24 kDa

We are unsure how to define the extra bands.



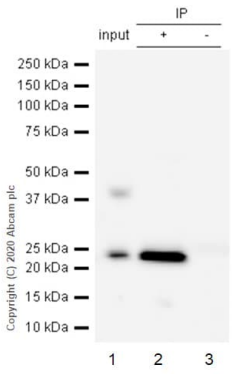
Immunocytochemistry/ Immunofluorescence - Anti-Ran antibody [EPR10791(B)] (ab155103)

Immunocytochemistry/ Immunofluorescence analysis of HeLa (Human cervix adenocarcinoma epithelial cell) cells labeling Ran with purified ab155103 at 1/100 dilution (10 µg/mL). Cells were fixed in 100% Methanol and permeabilized with None. Cells were counterstained with Ab195889 Anti-alpha Tubulin antibody [DM1A] - Microtubule Marker (Alexa Fluor® 594) 1/200 (2.5 µg/ml). Goat anti rabbit IgG (Alexa Fluor® 488, **ab150077**) was used as the secondary antibody at 1/1000 (2 µg/mL) dilution. DAPI (blue) was used as nuclear counterstain. PBS instead of the primary antibody was used as the secondary antibody only control.



Flow Cytometry (Intracellular) - Anti-Ran antibody [EPR10791(B)] (ab155103)

Intracellular Flow Cytometry analysis of HeLa (Human cervix adenocarcinoma epithelial cell) cells labeling Ran with purified ab155103 at 1/100 dilution (10µg/mL) (Red). Cells were fixed with 4% Paraformaldehyde and permeabilised with 90% Methanol. A Goat anti rabbit IgG (Alexa Fluor® 488, **ab150077**) secondary antibody was used at 1/2000. Isotype control - Rabbit monoclonal IgG (Black). Unlabeled control - Cell without incubation with primary antibody and secondary antibody (Blue).



Immunoprecipitation - Anti-Ran antibody [EPR10791(B)] (ab155103)

Purified ab155103 at 1/50 dilution (2 µg) immunoprecipitating Ran in HeLa whole cell lysate.

Lane 1 (input): HeLa (Human cervix adenocarcinoma epithelial cell) whole cell lysate 10 µg

Lane 2 (+): ab155103 + HeLa whole cell lysate.

Lane 3 (-): Rabbit monoclonal IgG (**ab172730**) instead of ab155103 in HeLa whole cell lysate.

VeriBlot for IP Detection Reagent (HRP) (**ab131366**) (1/1000 dilution) was used for Western blotting.

Blocking Buffer and concentration: 5% NFDM/TBST.

Diluting buffer and concentration: 5% NFDM/TBST.

Observed band size: 24 kDa

Anti-Ran antibody [EPR10791(B)] (ab155103)

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