abcam

Product datasheet

Alexa Fluor® 647 Anti-RENT1/hUPF1 antibody [EPR4681] ab201265

Recombinant RabMAb

2 Images

Overview

Product name Alexa Fluor® 647 Anti-RENT1/hUPF1 antibody [EPR4681]

Description Alexa Fluor® 647 Rabbit monoclonal [EPR4681] to RENT1/hUPF1

Host species Rabbit

Conjugation Alexa Fluor® 647. Ex: 652nm. Em: 668nm

Tested applications Suitable for: ICC/IF Species reactivity Reacts with: Human

Predicted to work with: Mouse

Synthetic peptide. This information is proprietary to Abcam and/or its suppliers. **Immunogen**

Positive control ICC/IF: HeLa cells

General notes Our RabMAb® technology is a patented hybridoma-based technology for making rabbit

monoclonal antibodies. For details on our patents, please refer to **RabMAb patents**.

Alexa Fluor[®] is a registered trademark of Molecular Probes, Inc., a Thermo Fisher Scientific Company. The Alexa Fluor® dye included in this product is provided under an intellectual property license from Life Technologies Corporation. As this product contains the Alexa Fluor® dye, the purchase of this product conveys to the buyer the non-transferable right to use the purchased product and components of the product only in research conducted by the buyer (whether the buyer is an academic or for-profit entity). As this product contains the Alexa Fluor® dye the sale of this product is expressly conditioned on the buyer not using the product or its components, or any materials made using the product or its components, in any activity to generate revenue, which may include, but is not limited to use of the product or its components: in manufacturing; (ii) to provide a service, information, or data in return for payment (iii) for therapeutic, diagnostic or prophylactic purposes; or (iv) for resale, regardless of whether they are sold for use in research. For information on purchasing a license to this product for purposes other than research, contact

Life Technologies Corporation, 5781 Van Allen Way, Carlsbad, CA 92008 USA or

outlicensing@thermofisher.com.

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.

Stable for 12 months at -20°C. Store In the Dark.

Storage buffer pH: 7.40

Preservative: 0.02% Sodium azide

Constituents: 30% Glycerol (glycerin, glycerine), PBS, 1% BSA

Purity Protein A purified

Clonality Monoclonal
Clone number EPR4681

Isotype IgG

Applications

The Abpromise guarantee Our Abpromise guarantee covers the use of ab201265 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
ICC/IF		1/100.

Target

Function Plays a role in replication-dependent histone mRNA degradation at the end of phase S. Part of a post-splicing multiprotein complex. Involved in nonsense-mediated decay (NMD) as part of the

SMG1C complex, a mRNA surveillance complex that recognizes and degrades mRNAs containing premature translation termination codons (PTCs). The complex probably acts by associating with ribosomes during tranlation termination on mRNPs. If an exon junction complex (EJC) is located 50-55 or more nucleotides downstream from the termination codon, RENT1 is phosphorylated by SMG1, triggering nonsense-mediated decay (NMD). Essential for embryonic

viability.

Tissue specificity Ubiquitous.

Sequence similaritiesBelongs to the DNA2/NAM7 helicase family.

Contains 1 C2H2-type zinc finger.

Domain The [ST]-Q motif constitutes a recognition sequence for kinases from the PI3/PI4-kinase family.

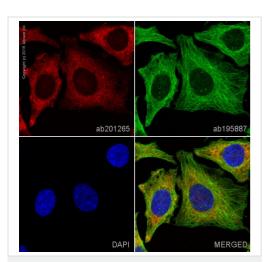
Post-translational Phosphorylated by SMG1; required for formation of mRNA surveillance complexes.

modifications Phosphorylated upon DNA damage, probably by ATM or ATR.

Cytoplasm > P-body. Hyperphosphorylated form is targeted to the P-body, while

unphosphorylated protein is distributed throughout the cytoplasm.

Images



Immunocytochemistry/ Immunofluorescence - Alexa Fluor® 647 Anti-RENT1/hUPF1 antibody [EPR4681] (ab201265)

ab201265 staining RENT1/hUPF1 in HeLa cells. The cells were fixed with 100% methanol (5min), permeabilized with 0.1% Triton X-100 for 5 minutes and then blocked with 1% BSA/10% normal goat serum/0.3M glycine in 0.1% PBS-Tween for 1h. The cells were then incubated overnight at +4°C with ab201265 at 1/100 dilution (shown in red) and ab195887, Mouse monoclonal to alpha Tubulin (Alexa Fluor[®] 488) at 1/250 dilution (shown in green). Nuclear DNA was labelled with DAPI (shown in blue).

Image was taken with a confocal microscope (Leica-Microsystems, TCS SP8).

This product also gave a positive signal under the same testing conditions in HeLa cells fixed with 4% formaldehyde (10 min).



Please note: All products are "FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES"

Our Abpromise to you: Quality guaranteed and expert technical support

- Replacement or refund for products not performing as stated on the datasheet
- Valid for 12 months from date of delivery
- Response to your inquiry within 24 hours
- We provide support in Chinese, English, French, German, Japanese and Spanish
- Extensive multi-media technical resources to help you

• We investigate all quality concerns to ensure our products perform to the highest standards

If the product does not perform as described on this datasheet, we will offer a refund or replacement. For full details of the Abpromise, please visit https://www.abcam.com/abpromise or contact our technical team.

Terms and conditions

• Guarantee only valid for products bought direct from Abcam or one of our authorized distributors