


## Product datasheet

# Anti-RENT1/hUPF1 antibody ab86057

[5 References](#) [2 Images](#)

### Overview

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<b>Product name</b>	Anti-RENT1/hUPF1 antibody
<b>Description</b>	Rabbit polyclonal to RENT1/hUPF1
<b>Host species</b>	Rabbit
<b>Tested applications</b>	<b>Suitable for:</b> WB, IP
<b>Species reactivity</b>	<b>Reacts with:</b> Mouse, Human <b>Predicted to work with:</b> Rat, Horse, Chicken, Guinea pig, Cow, Dog, Turkey, Pig, Xenopus laevis, Zebrafish, Rhesus monkey, Gorilla, Orangutan, Xenopus tropicalis, Medaka fish 
<b>Immunogen</b>	Synthetic peptide. This information is proprietary to Abcam and/or its suppliers.
<b>Positive control</b>	HeLa and NIH3T3 whole cell lysates.
<b>General notes</b>	<p>The Life Science industry has been in the grips of a reproducibility crisis for a number of years. Abcam is leading the way in addressing this with our range of recombinant monoclonal antibodies and knockout edited cell lines for gold-standard validation. Please check that this product meets your needs before purchasing.</p> <p>If you have any questions, special requirements or concerns, please send us an inquiry and/or contact our Support team ahead of purchase. Recommended alternatives for this product can be found below, along with publications, customer reviews and Q&amp;As</p>

### Properties

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<b>Form</b>	Liquid
<b>Storage instructions</b>	Shipped at 4°C. Upon delivery aliquot and store at -20°C. Avoid freeze / thaw cycles.
<b>Storage buffer</b>	pH: 6.8 Preservative: 0.09% Sodium azide Constituents: 0.1% BSA, Tris buffered saline
<b>Purity</b>	Immunogen affinity purified
<b>Purification notes</b>	ab86057 was affinity purified using an epitope specific to RENT1/hUPF1 immobilized on solid support.
<b>Clonality</b>	Polyclonal
<b>Isotype</b>	IgG

## Applications

### The Abpromise guarantee

Our **Abpromise guarantee** covers the use of ab86057 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
WB		1/2000 - 1/10000. Detects a band of approximately 134 kDa (predicted molecular weight: 134 kDa).
IP		Use at 2-5 µg/mg of lysate.

## 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 translation 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 similarities

Belongs 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.

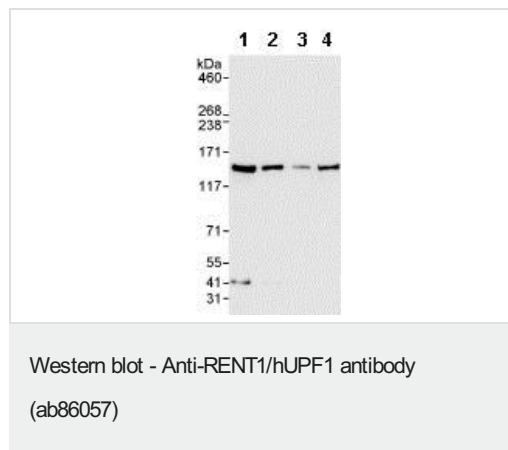
### Post-translational modifications

Phosphorylated by SMG1; required for formation of mRNA surveillance complexes.  
Phosphorylated upon DNA damage, probably by ATM or ATR.

### Cellular localization

Cytoplasm. Cytoplasm > P-body. Hyperphosphorylated form is targeted to the P-body, while unphosphorylated protein is distributed throughout the cytoplasm.

## Images



**All lanes :** Anti-RENT1/hUPF1 antibody (ab86057) at 0.04 µg/ml

**Lane 1 :** HeLa whole cell lysate at 50 µg

**Lane 2 :** HeLa whole cell lysate at 15 µg

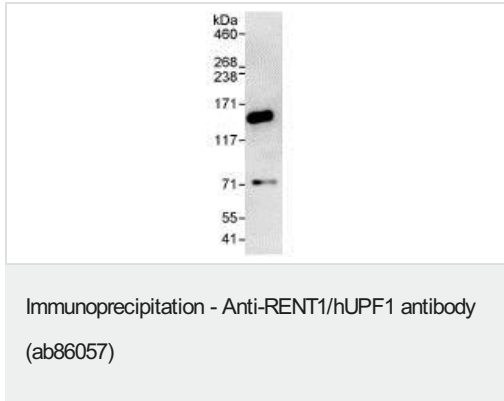
**Lane 3 :** HeLa whole cell lysate at 5 µg

**Lane 4 :** NIH3T3 whole cell lysate at 50 µg

**Predicted band size:** 134 kDa

**Observed band size:** 134 kDa

**Exposure time:** 10 seconds



Detection of RENT1/hUPF1 by Western Blot of Immunoprecipitate.  
ab86057 at 1µg/ml staining RENT1/hUPF1 in HeLa whole cell  
lysate immunoprecipitated using ab86057 at 3µg/mg lysate (1  
mg/IP; 20% of IP loaded/lane).

Detection: Chemiluminescence with exposure time of 10 seconds.

**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

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- 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
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