## Overview

**Product name**: Anti-eRF1 antibody  
**Description**: Rabbit polyclonal to eRF1  
**Host species**: Rabbit  
**Tested applications**: Suitable for: WB, ICC/IF, IP  
**Species reactivity**: Reacts with: Mouse, Rat, Human  
**Predicted to work with**: Rabbit, Cow, Xenopus laevis, Zebrafish  
**Immunogen**: Synthetic peptide conjugated to KLH derived from within residues 400 to the C-terminus of Human eRF1. Read Abcam's proprietary immunogen policy (Peptide available as [ab31798](https://www.abcam.com/index.html)).  
**Positive control**: This antibody gave a positive result in the following whole cell lysates: HeLa (Human epithelial carcinoma cell line) Jurkat (Human T cell lymphoblast-like cell line) A431 (Human epithelial carcinoma cell line) NIH 3T3 (Mouse embryonic fibroblast cell line) MEF1 (Mouse embryonic fibroblast cell line) PC12 (Rat adrenal pheochromocytoma cell line) This antibody gave a positive result in the following tissue lysates: Liver (Mouse) Kidney (Mouse) Testis (Mouse) Liver (Rat) Kidney (Rat)

## 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 or -80°C. Avoid freeze / thaw cycle.  
**Storage buffer**: Preservative: 0.02% Sodium Azide  
Constituents: 1% BSA, PBS, pH 7.4  
**Purity**: Immunogen affinity purified  
**Clonality**: Polyclonal  
**Isotype**: IgG

## Applications

Our Abpromise guarantee covers the use of ab31799 in the following tested applications.

The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.
Function
Directs the termination of nascent peptide synthesis (translation) in response to the termination codons UAA, UAG and UGA. Component of the transient SURF complex which recruits UPF1 to stalled ribosomes in the context of nonsense-mediated decay (NMD) of mRNAs containing premature stop codons.

Sequence similarities
Belongs to the eukaryotic release factor 1 family.

Cellular localization
Cytoplasm.

Images

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<tr>
<th>Application</th>
<th>Abreviews</th>
<th>Notes</th>
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<tbody>
<tr>
<td>WB</td>
<td>Use a concentration of 1 µg/ml. Detects a band of approximately 50 kDa (predicted molecular weight: 49 kDa).</td>
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<td>ICC/IF</td>
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<td>IP</td>
<td>Use an assay dependent dilution. PubMed: 20606008</td>
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Target

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Images

**Western blot - Anti-eRF1 antibody (ab31799)**

**All lanes**: Anti-eRF1 antibody (ab31799) at 1 µg/ml

**Lane 1**: HeLa (Human epithelial carcinoma cell line) Whole Cell Lysate

**Lane 2**: Jurkat whole cell lysate (ab7899)

**Lane 3**: A431 whole cell lysate (ab7909)

Lysates/proteins at 20 µg per lane.

**Secondary**

**All lanes**: Goat polyclonal to Rabbit IgG (Alexa Fluor® 680) at 1/10000 dilution

Performed under reducing conditions.

**Predicted band size**: 49 kDa

**Observed band size**: 50 kDa

**why is the actual band size different from the predicted?**
Western blot - Anti-eRF1 antibody (ab31799)

All lanes: Anti-eRF1 antibody (ab31799) at 1 µg/ml

Lane 1: NIH 3T3 whole cell lysate (ab7179)
Lane 2: MEF1 (Mouse embryonic fibroblast cell line) Whole Cell Lysate
Lane 3: Liver (Mouse) Tissue Lysate - normal tissue
Lane 4: Kidney (Mouse) Tissue Lysate
Lane 5: Testis (Mouse) Tissue Lysate - normal tissue
Lane 6: PC12 (Rat adrenal pheochromocytoma cell line) Whole Cell Lysate
Lane 7: Liver (Rat) Tissue Lysate
Lane 8: Kidney (Rat) Whole Cell Lysate - normal tissue (ab29480)

Lysates/proteins at 10 µg per lane.

Secondary

All lanes: IRDye 680 Conjugated Goat Anti-Rabbit IgG (H+L) at 1/10000 dilution

Performed under reducing conditions.

Predicted band size: 49 kDa

Observed band size: 50 kDa why is the actual band size different from the predicted?

Immunocytochemistry/ Immunofluorescence - Anti-eRF1 antibody (ab31799)

ICC/IF image of ab31799 stained human HeLa cells. The cells were PFA fixed (10 min), permabilised in TBS-T (20 min) and incubated with the antibody (ab31799, 1µg/ml) for 1h at room temperature. 1%BSA / 10% normal goat serum / 0.3M glycine was used to quench autofluorescence and block non-specific protein-protein interactions. The secondary antibody (green) was Alexa Fluor® 488 goat anti-rabbit IgG (H+L) used at a 1/1000 dilution for 1h. Alexa Fluor® 594 WGA was used to label plasma membranes (red). DAPI was used to stain the cell nuclei (blue).
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