# Anti-EEF2/Elongation factor 2 (phospho T56) antibody

**ab53114**

## Overview

<table>
<thead>
<tr>
<th><strong>Product name</strong></th>
<th>Anti-EEF2/Elongation factor 2 (phospho T56) antibody</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Description</strong></td>
<td>Rabbit polyclonal to EEF2/Elongation factor 2 (phospho T56)</td>
</tr>
<tr>
<td><strong>Host species</strong></td>
<td>Rabbit</td>
</tr>
<tr>
<td><strong>Specificity</strong></td>
<td>ab53114 detects endogenous levels of EEF2/Elongation factor 2 only when phosphorylated at threonine 56.</td>
</tr>
</tbody>
</table>

### Tested applications

**Suitable for:** ICC/IF, WB, ELISA, IHC-P

### Species reactivity

**Reacts with:** Mouse, Rat, Human

### Immunogen

Synthetic peptide corresponding to Human EEF2/Elongation factor 2.

### Positive control

Human breast carcinoma tissue and extracts from NIH 3T3 cells treated with serum.

### General notes

This product was previously labelled as EEF2

## Properties

<table>
<thead>
<tr>
<th><strong>Form</strong></th>
<th>Liquid</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Storage instructions</strong></td>
<td>Shipped at 4°C. Store at -20°C. Stable for 12 months at -20°C.</td>
</tr>
</tbody>
</table>
| **Storage buffer**        | pH: 7.40  
Preservative: 0.02% Sodium azide  
Constituents: 50% Glycerol, 0.87% Sodium chloride, PBS |
| **Purity**                | Immunogen affinity purified |
| **Purification notes**    | ab53114 was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific phosphopeptide. The antibody against non-phosphopeptide was removed by chromatography using non-phosphopeptide corresponding to the phosphorylation site. |
| **Clonality**             | Polyclonal |
| **Isotype**               | IgG |

## References

2 References  
2 Images
**Function**
Catalyzes the GTP-dependent ribosomal translocation step during translation elongation. During this step, the ribosome changes from the pre-translocational (PRE) to the post-translocational (POST) state as the newly formed A-site-bound peptidyl-tRNA and P-site-bound deacylated tRNA move to the P and E sites, respectively. Catalyzes the coordinated movement of the two tRNA molecules, the mRNA and conformational changes in the ribosome.

**Sequence similarities**
Belongs to the GTP-binding elongation factor family. EF-G/EF-2 subfamily.

**Post-translational modifications**
Phosphorylation by EF-2 kinase completely inactivates EF-2. Diphthamide is 2-[3-carboxyamido-3-(trimethyl-ammonio)propyl]histidine. Diphthamide can be ADP-ribosylated by diphtheria toxin and by Pseudomonas exotoxin A, thus arresting protein synthesis. ISGylated.

**Cellular localization**
Cytoplasm.

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**Applications**

Our Abpromise guarantee covers the use of ab53114 in the following tested applications.

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

<table>
<thead>
<tr>
<th>Application</th>
<th>Abreviews</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>ICC/IF</td>
<td></td>
<td>Use at an assay dependent concentration. PubMed: 24130777</td>
</tr>
<tr>
<td>WB</td>
<td>1/300 - 1/1000. Detects a band of approximately 95 kDa (predicted molecular weight: 95 kDa).</td>
<td></td>
</tr>
<tr>
<td>ELISA</td>
<td>1/10000.</td>
<td></td>
</tr>
<tr>
<td>IHC-P</td>
<td>Use at an assay dependent concentration.</td>
<td></td>
</tr>
</tbody>
</table>

**Target**

**Function**
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**Images**

**All lanes**: Anti-EEF2/Elongation factor 2 (phospho T56) antibody (ab53114) at 1/300 dilution

**Lane 1**: Extract from NIH 3T3 cells treated with serum (10%, 30mins) with Immunising peptide

**Lane 2**: Extract from NIH 3T3 cells treated with serum (10%, 30mins)

**Predicted band size**: 95 kDa

**Observed band size**: 95 kDa
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-EEF2/Elongation factor 2 (phospho T56) antibody (ab53114)

ab53114 at 1/50 dilution staining EEF2/Elongation factor 2 in human breast carcinoma by Immunohistochemistry, Paraffin embedded tissue, in the absence and presence of the immunising peptide.

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