

## EEF2 Antibody

Catalog No: #32582

Package Size: #32582-1 50ul #32582-2 100ul

Orders: order@signalwayantibody.com

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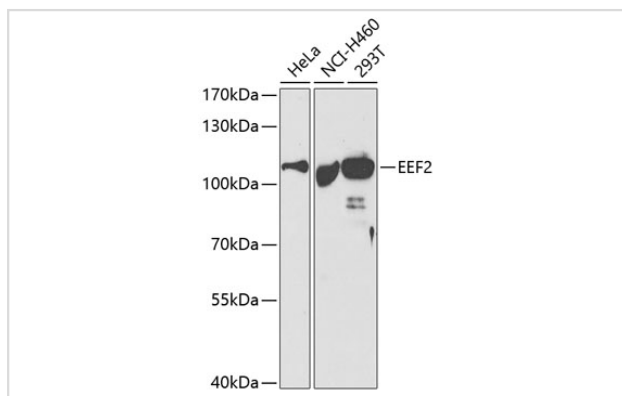
## Description

Product Name	EEF2 Antibody
Host Species	Rabbit
Clonality	Polyclonal
Purification	Antibodies were purified by affinity purification using immunogen.
Applications	WB
Species Reactivity	Human
Specificity	The antibody detects endogenous level of total EEF2 protein.
Immunogen Type	Recombinant Protein
Immunogen Description	Recombinant protein of human EEF2.
Target Name	EEF2
Other Names	EEF-2; EF2;
Accession No.	Swiss-Prot:P13639NCBI Gene ID:1938
Uniprot	P13639
GeneID	1938;
SDS-PAGE MW	95KD
Concentration	1.0mg/ml
Formulation	Supplied at 1.0mg/mL in phosphate buffered saline (without Mg <sup>2+</sup> and Ca <sup>2+</sup> ), pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol.
Storage	Store at -20°C

## Application Details

WB □ 1:500 - 1:2000

## Images



Western blot analysis of extracts of various cell lines, using EEF2 at 1:500 dilution.

## Background

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Eukaryotic elongation factor 2 (eEF2) catalyzes the translocation of peptidyl-tRNA from the A site to the P site on the ribosome. It has been shown that phosphorylation of eEF2 at threonine 56 by eEF2 kinase inhibits its activity (1-4). eEF2 kinase is normally dependent on Ca<sup>2+</sup> ions and calmodulin (5,6). eEF2 kinase can also be activated by PKA in response to elevated cAMP levels (7-9), which are generally increased in stress- or starvation-related conditions. A variety of treatments known to raise intracellular Ca<sup>2+</sup> or cAMP levels have been shown to result in increased phosphorylation of eEF2, and thus to inhibit peptide-chain elongation. The inactive phosphorylated eEF2 can be converted to its active nonphosphorylated form by a protein phosphatase, most likely a form of protein phosphatase-2A (PP-2A). Insulin, which activates protein synthesis in a wide range of cell types, induces rapid dephosphorylation of eEF2 through mTOR signaling and may involve modulation of the activity of the PP-2A or the eEF2 kinase or both (10).

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Note: This product is for in vitro research use only