#### **Product Datasheet**

# **EEF2** Antibody

Catalog No: #32582

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



Orders: order@signalwayantibody.com Support: tech@signalwayantibody.com

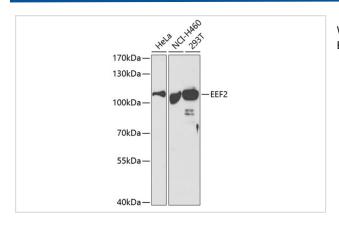
# Description

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
SDS-PAGE MW	95KD
Concentration	1.0mg/ml
Formulation	Supplied at 1.0mg/mL in phosphate buffered saline (without Mg2+ and Ca2+), 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 antibody at 1:500 dilution.

#### Background

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 Ca2+ 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 Ca2+ 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).

Note: This product is for in vitro research use only and is not intended for use in humans or animals.