

EIF4E Antibody

Catalog No: #32632

Package Size: #32632-1 50ul #32632-2 100ul

Orders: order@signalwayantibody.com

Support: tech@signalwayantibody.com

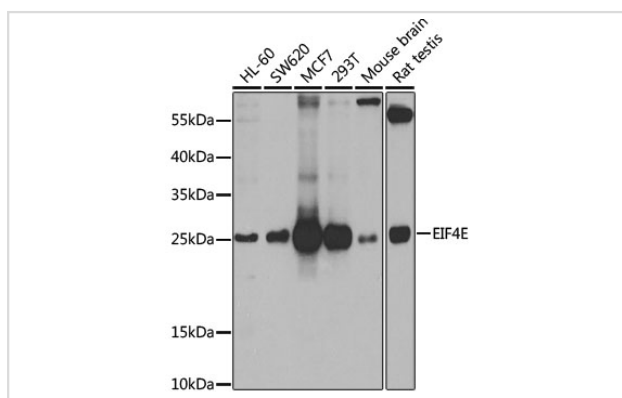
Description

Product Name	EIF4E Antibody
Host Species	Rabbit
Clonality	Polyclonal
Purification	Antibodies were purified by affinity purification using immunogen.
Applications	WB,IHC,IF
Species Reactivity	Human,Mouse,Rat
Specificity	The antibody detects endogenous level of total EIF4E protein.
Immunogen Type	Recombinant Protein
Immunogen Description	Recombinant protein of human EIF4E.
Target Name	EIF4E
Other Names	CBP; EIF4E1; EIF4EL1; EIF4F; MGC111573
Accession No.	Swiss-Prot:P06730NCBI Gene ID:1977
Uniprot	P06730
GeneID	1977;
SDS-PAGE MW	29KD
Concentration	1.0mg/ml
Formulation	Supplied at 1.0mg/mL in phosphate buffered saline (without Mg ²⁺ and Ca ²⁺), pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol.
Storage	Store at -20°C

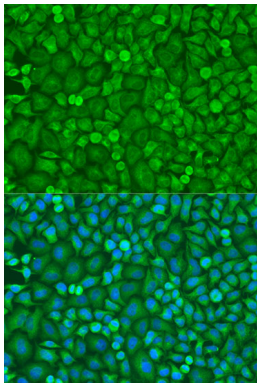
Application Details

WB □ 1:500 - 1:2000 IHC □ 1:50 - 1:100 IF □ 1:50 - 1:200 IP □ 1:50 - 1:100

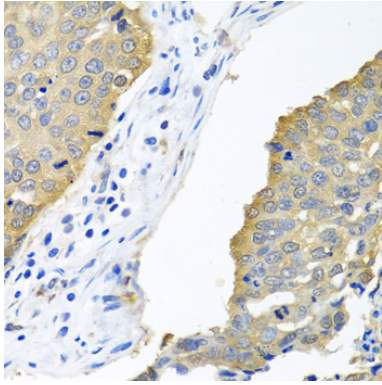
Images



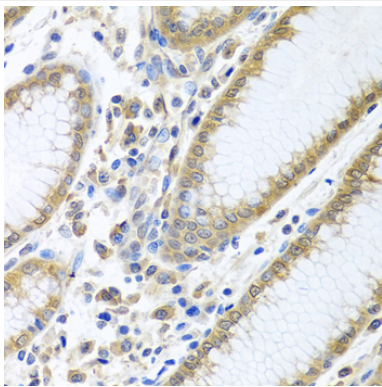
Western blot analysis of extracts of various cell lines, using EIF4E at 1:1000 dilution.



Immunofluorescence analysis of U2OS cells using EIF4E at dilution of 1:100. Blue: DAPI for nuclear staining.



Immunohistochemistry of paraffin-embedded human lung cancer using EIF4E at dilution of 1:100 (40x lens).



Immunohistochemistry of paraffin-embedded human stomach using EIF4E at dilution of 1:100 (40x lens).

Background

Eukaryotic initiation factor 4E (eIF4E) binds to the mRNA cap structure to mediate the initiation of translation (1,2). eIF4E interacts with eIF4G, a scaffold protein that promotes assembly of eIF4E and eIF4A into the eIF4F complex (2). eIF4B is thought to assist the eIF4F complex in translation initiation. Upon activation by mitogenic and/or stress stimuli mediated by Erk and p38 MAPK, Mnk1 phosphorylates eIF4E at Ser209 in vivo (3,4). Two Erk and p38 MAPK phosphorylation sites in mouse Mnk1 (Thr197 and Thr202) are essential for Mnk1 kinase activity (3). The carboxy-terminal region of eIF4G also contains serum-stimulated phosphorylation sites, including Ser1108, Ser1148, and Ser1192 (5). Phosphorylation at these sites is blocked by the PI3 kinase inhibitor LY294002 and by the FRAP/mTOR inhibitor rapamycin.

Note: This product is for in vitro research use only