

Phospho-Ser358 Eukaryotic Elongation Factor 1 alpha 2 (eEF1A2) Antibody
Affinity purified rabbit polyclonal antibody
Catalog # AN1251

Specification

Phospho-Ser358 Eukaryotic Elongation Factor 1 alpha 2 (eEF1A2) Antibody - Product Information

Application	WB
Primary Accession	Q05639
Reactivity	Mouse
Predicted	Human, Rat, Monkey, Chicken, Xenopus
Host	Rabbit
Clonality	polyclonal
Calculated MW	50 KDa

Phospho-Ser358 Eukaryotic Elongation Factor 1 alpha 2 (eEF1A2) Antibody - Additional Information

Gene ID	1917
Gene Name	EEF1A2

Other Names

Elongation factor 1-alpha 2, EF-1-alpha-2, Eukaryotic elongation factor 1 A-2, eEF1A-2, Statin-S1, EEF1A2, EEF1AL, STN

Target/Specificity

Synthetic phospho-peptide corresponding to amino acid residues surrounding Ser358 conjugated to KLH.

Dilution

WB~~ 1:1000

Format

Prepared from rabbit serum by affinity purification via sequential chromatography on phospho- and dephosphopeptide affinity columns.

Antibody Specificity

Specific for the ~50k eEF1A2 phosphorylated at Ser358. Immunolabeling of the eEF1A2 band is blocked by the treatment of the lysate with lambda phosphatase (30 minutes, 800 units / 1 mg protein).

Storage

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions

Phospho-Ser358 Eukaryotic Elongation Factor 1 alpha 2 (eEF1A2) Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

Shipping

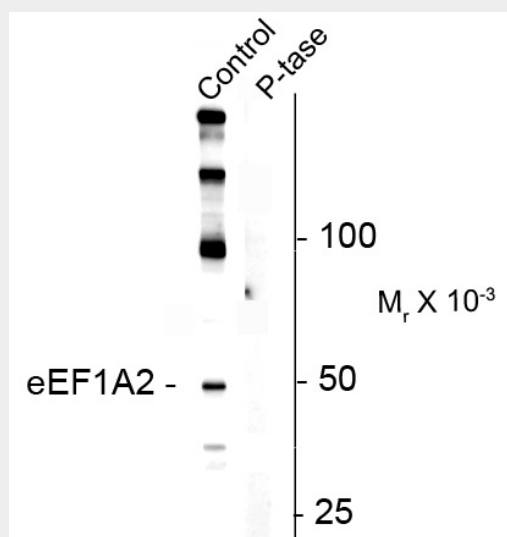
Blue Ice

Phospho-Ser358 Eukaryotic Elongation Factor 1 alpha 2 (eEF1A2) Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

Phospho-Ser358 Eukaryotic Elongation Factor 1 alpha 2 (eEF1A2) Antibody - Images



Western blot of mouse hippocampus lysate showing specific immunolabeling of the ~ 50k eEF1A2 protein phosphorylated at Ser358. Immunolabeling is blocked by treatment of the lysate with lambda phosphatase (P-tase).

Phospho-Ser358 Eukaryotic Elongation Factor 1 alpha 2 (eEF1A2) Antibody - Background

Eukaryotic Elongation Factor eEF1A exists in two variant forms, eEF1A1 and eEF1A2. While eEF1A1 is almost ubiquitously expressed in humans, eEF1A2 is predominantly found in heart, brain, and skeletal muscle (Knudsen et al., 1993). Expression of eEF1A2 may have a role in ovarian cancer, as its expression is drastically increased in human ovarian tumors (Anand et al., 2002). Due to differences in structural models between the two isoforms, eEF1A1 and eEF1A2 likely have variant-specific phosphorylation sites (Soares et al., 2009). Ribosome-associated JNK phosphorylates Ser358 on eEF1A2 to promote degradation of newly synthesized polypeptides by the proteasome (Gandin et al., 2013).

Phospho-Ser358 Eukaryotic Elongation Factor 1 alpha 2 (eEF1A2) Antibody - References

Knudsen SM, Frydenberg J, Clark BF, Leffers H. Tissue-dependent variation in the expression of elongation factor-1 alpha isoforms: isolation and characterization of a cDNA encoding a novel variant of human elongation-factor 1 alpha. *Eur J Biochem.* 1993;215:549-554.
Anand N, Murphy s, Amann G, Wernick M, Porter LA, Cukier IH, Collins C, Gray JW, Diebold J, Demetrick DJ. Protein elongation factor EEF1A2 is a putative oncogene in ovarian cancer. *Nat*

Genet. 2002;31:301-305.

Soares DC, Barlow PN, Newbery HJ, Porteous DJ, Abbot CM. Structural models of human eEF1A1 and eEF1A2 reveal two distant surface clusters of sequence variation and potential differences in phosphorylation. PLoS One. 2009 Jul 28;4(7):e6315.

Gandin V, Gutierrez GJ, Brill LM, Varsano T, Feng Y, Aza-Blanc P, Au Q, McLaughlan S, Ferreira TA, Alain T, Sonenberg N, Topisirovic I, Ronai ZA. Degradation of newly synthesized polypeptides by ribosome-associated RACK1/c-Jun N-Terminal Kinase/Eukaryotic Elongation Factor 1A2 complex. 2013 Jul;33(13):2510-26.

Phospho-Ser358 Eukaryotic Elongation Factor 1 alpha 2 (eEF1A2) Antibody - Citations

- [Alcohol Intoxication Following Muscle Contraction in Mice Decreases Muscle Protein Synthesis But Not mTOR Signal Transduction.](#)