

Product datasheet for **AP02522PU-S**

eIF2 alpha (EIF2S1) pSer51 Rabbit Polyclonal Antibody

Product data:

Product Type:	Primary Antibodies
Applications:	IF, IHC, WB
Recommended Dilution:	Western Blot: 1/500-1/1000. Incubate membrane with diluted antibody in 5% nonfat milk, 1xTBS, 0.1% Tween-20 at 4°C with gentle shaking overnight. Immunofluorescence: 1/100-1/200. Immunohistochemistry on Paraffin-Embedded Sections: 1/50-1/100.
Reactivity:	Human, Mouse, Rat
Host:	Rabbit
Clonality:	Polyclonal
Immunogen:	Synthetic phosphopeptide derived from Human eIF2A around the phosphorylation site of Serine 51 (E-L-SP-R-R).
Specificity:	This antibody detects endogenous levels of eIF2A only when phosphorylated at Serine 51.
Formulation:	PBS (without Mg ²⁺ and Ca ²⁺), pH 7.4, 150 mM NaCl, 0.02% Sodium Azide and 50% Glycerol. State: Aff - Purified State: Liquid purified Ig fraction.
Concentration:	lot specific
Purification:	Affinity Chromatography using epitope-specific phosphopeptide. The antibody against non-phosphopeptide was removed by chromatography using non-phosphopeptide corresponding to the phosphorylation site.
Conjugation:	Unconjugated
Storage:	Upon receipt, store undiluted (in aliquots) at -20°C. Avoid repeated freezing and thawing.
Stability:	Shelf life: one year from despatch.
Gene Name:	eukaryotic translation initiation factor 2 subunit alpha
Database Link:	Entrez Gene 1965 Human P05198



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Background:

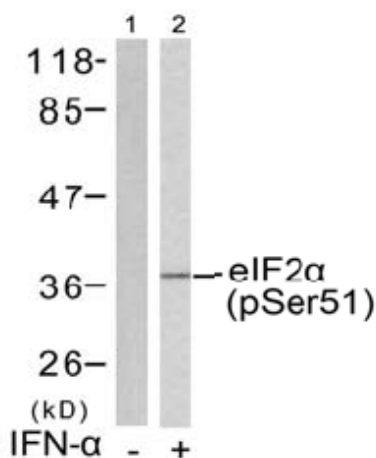
eIF2 alpha is a 36 kDa protein which is ubiquitously expressed in many cell types. The eIF2 protein, which is composed of three subunits (alpha, beta and gamma), is one of the key molecules in the initiation of translation. In mammalian cells, eIF2 alpha is phosphorylated at serine 51 (human EIF2 alpha, the equivalent residue in mouse is serine 52) by at least two kinases: the haem-controlled repressor (HCR) and the interferon inducible double stranded RNA-dependent protein kinase (PKR). Phosphorylation of eIF2 alpha blocks the GDP-GTP exchange activity of eIF2 beta, resulting in the suppression of protein synthesis. The phosphorylation of eIF2 alpha is an important regulatory process in protein synthesis.

Synonyms:

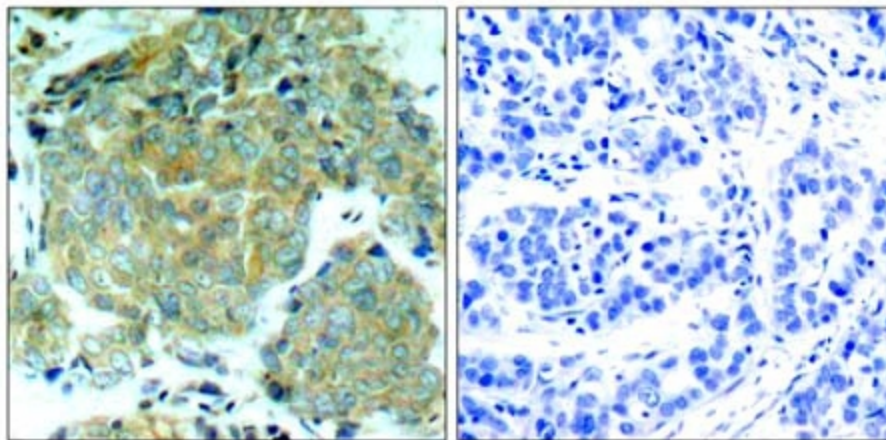
EIF2-A, eIF-2A, eIF-2-alpha, eIF-2alpha, eIF2 alpha

Note:

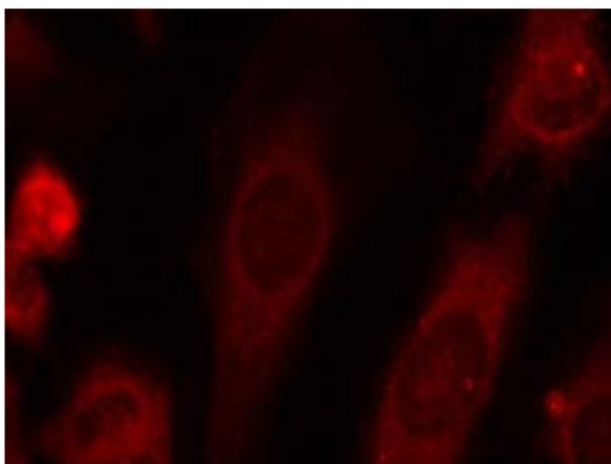
Molecular Weight: 38 kDa

Product images:

Western blot analysis of extracts from K562 cells untreated (Lane 1) or treated with IFN-alpha (Lane 2) using eIF2A antibody pSer51



Immunohistochemical analysis of Paraffin-Embedded Human breast carcinoma tissue using eIF2A antibody pSer51



Immunofluorescence staining of methanol-fixed HeLa cells using eIF2A antibody pSer51