

## Product datasheet for AP08033PU-N

## OriGene Technologies, Inc.

9620 Medical Center Drive, Ste 200 Rockville, MD 20850, US Phone: +1-888-267-4436 https://www.origene.com techsupport@origene.com EU: info-de@origene.com CN: techsupport@origene.cn

## elF2 alpha (EIF2S1) pSer49 Rabbit Polyclonal Antibody

**Product data:** 

**Product Type:** Primary Antibodies

**Applications:** IF, IHC, WB

Recommended Dilution: Immunofluorescence: 1/100-1/200.

Immunohistochemistry on Paraffin-Embedded Sections: 1/50 - 1/100.

Western Blot: 1/500 - 1/1000; Incubate membrane with diluted antibody in 5% nonfat milk,

1X TBS, 0,1% Tween-20 at 4°C with gentle shaking, overnight.

Reactivity: Human, Mouse, Rat

**Host:** Rabbit

Clonality: Polyclonal

**Immunogen:** Synthetic phosphopeptide derived from human eIF2a around the phosphorylation site of

Serine 49 (L-L-SP-E-L).

**Specificity:** Antibody detects endogenous levels of eIF2a only when phosphorylated at Serine 49.

Formulation: PBS (without Mg2+ and Ca2+), 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

**Conjugation:** Unconjugated

Storage: Store the antibody (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





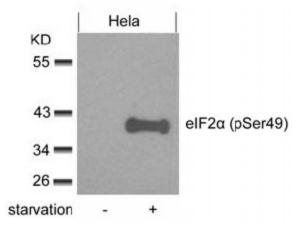
Background:

The translation initiation factor eIF2 catalyzes the first regulated step of protein synthesis initiation, promoting the binding of the initiator tRNA to 40S ribosomal subunits. Binding occurs as a ternary complex of methionyl-tRNA, eIF2, and GTP. eIF2 is composed of 3 nonidentical subunits, alpha (36 kD), beta (38 kD), and gamma (52 kD). The rate of formation of the ternary complex is modulated by the phosphorylation state of eIF2-alpha.

Synonyms:

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

## **Product images:**



Western Blot analysis of extracts from HeLa cells untreated or treated with starvation using eIF2alpha (pSer49) antibody

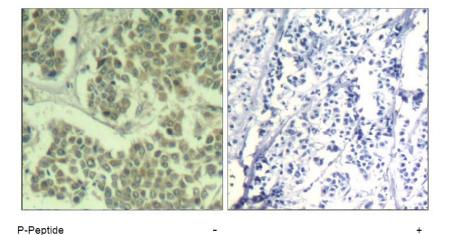


Figure 1. Immunohistochemical analysis of paraffin-embedded human breast carcinoma tissue using eIF2a pSer49) Antibody.



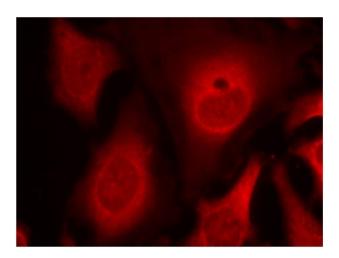


Figure 2. Immunofluorescence staining of methanol-fixed HeLa cells using eIF2-alpha (phospho-Ser49) Antibody (Red).