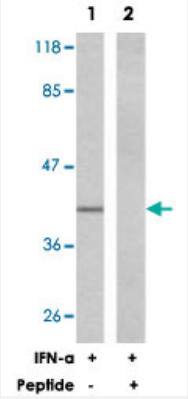
EIF2S1 polyclonal antibody

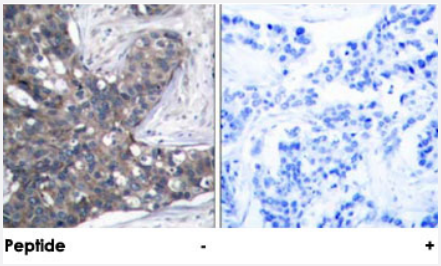
Catalog # PAB18469 Size 100 ug

Applications



Western Blot (Cell lysate)

Western blot analysis of extracts from K-562 cells untreated or treated with IFN-a (1000 U/mL, 18 hours), using EIF2S1 polyclonal antibody (Cat # PAB18469).
Peptide "+" means "peptide blocking".



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections)

Immunohistochemical analysis of paraffin-embedded human breast carcinoma tissue using EIF2S1 polyclonal antibody (Cat # PAB18469).
Peptide "+" means "peptide blocking".

Specification

Product Description	Rabbit polyclonal antibody raised against synthetic peptide of EIF2S1.
Immunogen	A synthetic peptide corresponding to residues surrounding S51 of human EIF2S1.
Host	Rabbit
Reactivity	Human, Mouse, Rat
Specificity	This antibody is specific to EIF2S1.
Form	Liquid

Purification	Affinity purification
Concentration	1 mg/mL
Recommend Usage	Western Blot (1:500-1:1000) Immunohistochemistry (1:50-1:100) ELISA (1:10000) The optimal working dilution should be determined by the end user.
Storage Buffer	In PBS, 150mM NaCl, pH 7.4 (50% glycerol, 0.02% sodium azide)
Storage Instruction	Store at -20°C. Aliquot to avoid repeated freezing and thawing.
Note	This product contains sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which shoul d be handled by trained staff only.

Applications

- Western Blot (Cell lysate)

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- Enzyme-linked Immunoabsorbent Assay

Gene Info — EIF2S1

Entrez GeneID	1965
Protein Accession#	P05198
Gene Name	EIF2S1
Gene Alias	EIF-2, EIF-2A, EIF-2alpha, EIF2, EIF2A
Gene Description	eukaryotic translation initiation factor 2, subunit 1 alpha, 35kDa
Omim ID	603907

Gene Ontology	Hyperlink
Gene Summary	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 (3 6 kD), beta (38 kD, MIM 603908), and gamma (52 kD, MIM 300161). The rate of formation of the ternary complex is modulated by the phosphorylation state of eIF2-alpha (Ernst et al., 1987 [PubMed 2948954]).[supplied by OMIM
Other Designations	eIF-2-alpha|eukaryotic translation initiation factor 2, subunit 1 (alpha, 35kD)

Publication Reference

- Multifactorial contributions to an acute DNA damage response by BRCA1/BARD1-containing complexes.

  Greenberg RA, Sobhian B, Pathania S, Cantor SB, Nakatani Y, Livingston DM.

  Genes & Development 2006 Jan; 20(1):34.

- BRCA1 is required for common-fragile-site stability via its G2/M checkpoint function.

  Arlt MF, Xu B, Durkin SG, Casper AM, Kastan MB, Glover TW.

  Molecular and Cellular Biology 2004 Aug; 24(15):6701.

- Chk2 phosphorylation of BRCA1 regulates DNA double-strand break repair.

  Zhang J, Willers H, Feng Z, Ghosh JC, Kim S, Weaver DT, Chung JH, Powell SN, Xia F.

  Molecular and Cellular Biology 2004 Jan; 24(2):708.

- Involvement of the cohesin protein, Smc1, in Atm-dependent and independent responses to DNA damage.

  Kim ST, Xu B, Kastan MB.

  Genes & Development 2002 Mar; 16(5):560.

- Functional interactions between BRCA1 and the checkpoint kinase ATR during genotoxic stress.

  Tibbetts RS, Cortez D, Brumbaugh KM, Scully R, Livingston D, Elledge SJ, Abraham RT.

  Genes & Development 2000 Dec; 14(23):2989.

Disease

- Hepatitis B