

EIF2S3 / EIF2G Antibody (clone 1H3)

Mouse Monoclonal Antibody Catalog # ALS14526

Specification

EIF2S3 / EIF2G Antibody (clone 1H3) - Product Information

Application Primary Accession Reactivity Host Clonality Calculated MW IHC <u>P41091</u> Human Mouse Monoclonal 51kDa KDa

EIF2S3 / EIF2G Antibody (clone 1H3) - Additional Information

Gene ID 1968

Other Names Eukaryotic translation initiation factor 2 subunit 3, Eukaryotic translation initiation factor 2 subunit gamma X, eIF-2-gamma X, eIF-2gX, EIF2S3, EIF2G

Target/Specificity Human EIF2S3 / EIF2G

Reconstitution & Storage Short term 4°C, long term aliquot and store at -20°C, avoid freeze thaw cycles.

Precautions EIF2S3 / EIF2G Antibody (clone 1H3) is for research use only and not for use in diagnostic or therapeutic procedures.

EIF2S3 / EIF2G Antibody (clone 1H3) - Protein Information

Name EIF2S3

Synonyms EIF2G

Function

Member of the eIF2 complex that functions in the early steps of protein synthesis by forming a ternary complex with GTP and initiator tRNA (PubMed:31836389). This complex binds to a 40S ribosomal subunit, followed by mRNA binding to form the 43S pre-initiation complex (43S PIC) (By similarity). Junction of the 60S ribosomal subunit to form the 80S initiation complex is preceded by hydrolysis of the GTP bound to eIF2 and release of an eIF2-GDP binary complex (By similarity). In order for eIF2 to recycle and catalyze another round of initiation, the GDP bound to eIF2 must exchange with GTP by way of a reaction catalyzed by eIF-2B (By similarity).

Cellular Location



Cytoplasm, cytosol {ECO:0000250|UniProtKB:Q09130}

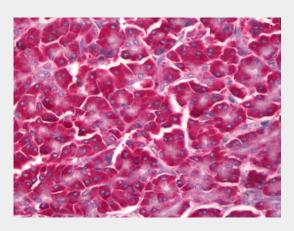
Tissue Location Expressed in testis, brain, liver and muscle.

EIF2S3 / EIF2G Antibody (clone 1H3) - Protocols

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

- <u>Western Blot</u>
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- <u>Cell Culture</u>

EIF2S3 / EIF2G Antibody (clone 1H3) - Images



Anti-EIF2S3 / EIF2G antibody IHC of human pancreas.

EIF2S3 / EIF2G Antibody (clone 1H3) - Background

eIF-2 functions in the early steps of protein synthesis by forming a ternary complex with GTP and initiator tRNA. This complex binds to a 40S ribosomal subunit, followed by mRNA binding to form a 43S preinitiation complex. Junction of the 60S ribosomal subunit to form the 80S initiation complex is preceded by hydrolysis of the GTP bound to eIF-2 and release of an eIF-2-GDP binary complex. In order for eIF-2 to recycle and catalyze another round of initiation, the GDP bound to eIF-2 must exchange with GTP by way of a reaction catalyzed by eIF-2B.

EIF2S3 / EIF2G Antibody (clone 1H3) - References

Gaspar N.J., et al.J. Biol. Chem. 269:3415-3422(1994). Goshima N., et al.Nat. Methods 5:1011-1017(2008). Mural R.J., et al.Submitted (JUL-2005) to the EMBL/GenBank/DDBJ databases. Gevaert K., et al.Nat. Biotechnol. 21:566-569(2003). Bienvenut W.V., et al.Submitted (DEC-2008) to UniProtKB.