

Store at  
-20C  
#20765**eIF5A (D8L8Q) Rabbit mAb**

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**For Research Use Only. Not for Use in Diagnostic Procedures.**

Applications:	Reactivity:	Sensitivity:	MW (kDa):	Source/Isotype:	UniProt ID:	Entrez-Gene Id:
W	H M R	Endogenous	18	Rabbit IgG	#P63241	1984

**Product Usage Information****Application**

Western Blotting

**Dilution**

1:1000

**Storage**

Supplied in 10 mM sodium HEPES (pH 7.5), 150 mM NaCl, 100 µg/ml BSA, 50% glycerol and less than 0.02% sodium azide. Store at -20°C. Do not aliquot the antibody.

**Specificity/Sensitivity**

eIF5A (D8L8Q) Rabbit mAb recognizes endogenous levels of total eIF5A protein.

**Source / Purification**

Monoclonal antibody is produced by immunizing animals with a synthetic peptide corresponding to residues surrounding Asp104 of human eIF5A protein.

**Background**

Eukaryotic initiation factor 5A (eIF5A) is an mRNA-binding protein that is involved in translation elongation and plays an important role in promoting translation of polyproline motifs (1-4). The *eIF5A* (*eIF5A1*) and *eIF5A2* genes encode the two vertebrate eIF5A isoforms. While eIF5A1 is expressed constitutively in all tissues, eIF5A2 is mainly expressed in gonads. eIF5A and eIF5A2 are the only identified proteins that contain the distinctive amino acid hypusine, which is generated posttranslationally from lysine through a highly conserved polyamine metabolism pathway. eIF5A function and hypusine modification are both essential for cell proliferation, as knock down of eIF5A expression or blocking eIF5A hypusine modification suppresses cancer cell proliferation (5-7). Interestingly, eIF5A is an identified component of a tumor suppressor network of the polyamine-hypusine axis. Co-suppression of both eIF5A and adenosylmethionine decarboxylase 1 (AMD1) promotes lymphomagenesis in mice, while heterozygous deletions of the corresponding *AMD1* and *eIF5A* genes often occur together in human lymphomas (8).

**Background References**

1. Saini, P. et al. (2009) *Nature* 459, 118-21.
2. Ude, S. et al. (2013) *Science* 339, 82-5.
3. Doerfel, L.K. et al. (2013) *Science* 339, 85-8.
4. Gutierrez, E. et al. (2013) *Mol Cell* 51, 35-45.
5. Wolff, E.C. et al. (2007) *Amino Acids* 33, 341-50.
6. Park, M.H. et al. (2010) *Amino Acids* 38, 491-500.
7. Mémin, E. et al. (2014) *Cancer Res* 74, 552-62.
8. Scuoppo, C. et al. (2012) *Nature* 487, 244-8.

**Species Reactivity**

Species reactivity is determined by testing in at least one approved application (e.g., western blot).

**Western Blot Buffer**

**IMPORTANT:** For western blots, incubate membrane with diluted primary antibody in 5% w/v BSA, 1X TBS, 0.1% Tween® 20 at 4°C with gentle shaking, overnight.

**Applications Key**

**W:** Western Blotting

**Cross-Reactivity Key**

**H:** Human **M:** Mouse **R:** Rat

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