

Datasheet for ABIN7602568

anti-EIF5A antibody (AA 86-154)



Overview

Quantity:	100 μg
Target:	EIF5A
Binding Specificity:	AA 86-154
Reactivity:	Human, Mouse, Rat
Host:	Rabbit
Clonality:	Polyclonal
Conjugate:	This EIF5A antibody is un-conjugated
Application:	Western Blotting (WB), ELISA, Immunohistochemistry (IHC), Immunofluorescence (IF), Flow Cytometry (FACS), Immunocytochemistry (ICC)

Product Details

Purpose:	Anti-EIF5A Antibody Picoband®
Immunogen:	E.coli-derived human EIF5A recombinant protein (Position: R86-K154).
Isotype:	IgG
Cross-Reactivity (Details):	No cross-reactivity with other proteins.
Characteristics:	Anti-EIF5A Antibody Picoband® (ABIN7602568). Tested in ELISA, Flow Cytometry, IF, IHC, ICC, WB applications. This antibody reacts with Human, Mouse, Rat. The brand Picoband indicates this is a premium antibody that guarantees superior quality, high affinity, and strong signals with minimal background in Western blot applications. Only our best-performing antibodies are designated as Picoband, ensuring unmatched performance.
Purification:	Immunogen affinity purified.

Target Details

Target:	EIF5A
Alternative Name:	EIF5A (EIF5A Products)
Background:	Synonyms: Dual specificity mitogen-activated protein kinase kinase 4, MAP kinase kinase 4,
	MAPKK 4, JNK-activating kinase 1, MAPK/ERK kinase 4, MEK 4, SAPK/ERK kinase 1, SEK1,
	Stress-activated protein kinase kinase 1, SAPK kinase 1, SAPKK-1, SAPKK1, c-Jun N-terminal
	kinase kinase 1, JNKK, MAP2K4, JNKK1, MEK4, MKK4, PRKMK4, SEK1, SERK1, SKK1
	Tissue Specificity: Abundant expression is seen in the skeletal muscle. It is also widely
	expressed in other tissues.
	Background: Eukaryotic translation initiation factor 5A-1 is a protein that in humans is encoded
	by the EIF5A gene. 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. 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. 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.
Molecular Weight:	18 kDa
Gene ID:	1984
UniProt:	P63241
Pathways:	Regulation of Muscle Cell Differentiation
Application Details	
Application Notes:	Western blot, 0.25-0.5 μg/mL, Human, Mouse, Rat
	Immunohistochemistry(Paraffin-embedded Section), 2-5 μg/mL, Human, Mouse, Rat
	Immunocytochemistry/Immunofluorescence, 5 µg/mL, Human
	Flow Cytometry (Fixed), 1-3 μg/1x10 ⁶ cells, Mouse, Rat
	ELISA, 0.1-0.5 μg/mL, -

Application Details

1. Doerfel, L. K., Wohlgemuth, I., Kothe, C., Peske, F., Urlaub, H., Rodnina, M. V. EF-P is essential for rapid synthesis of proteins containing consecutive proline residues. Science 339: 85-88, 2013. 2. Faundes, V., Jennings, M. D., Crilly, S., Legraie, S., Withers, S. E., Cuvertino, S., Davies, S. J., Douglas, A. G. L., Fry, A. E., Harrison, V., Amiel, J., Lehalle, D., and 12 others. Impaired eIF5A function causes a Mendelian disorder that is partially rescued in model systems by spermidine. Nature Commun. 12: 833, 2021. 3. Gutierrez, E., Shin, B.-S., Woolstenhulme, C. J., Kim, J.-R., Saini, P., Buskirk, A. R., Dever, T. E. eIF5A promotes translation of polyproline motifs. Molec. Cell 51: 35-45, 2013.

Restrictions:

For Research Use only

Handling

Format:	Lyophilized
Reconstitution:	Adding 0.2 mL of distilled water will yield a concentration of 500 μg/mL.
Concentration:	500 μg/mL
Buffer:	Each vial contains 4 mg Trehalose, 0.9 mg NaCl, 0.2 mg Na2HPO4.
Storage:	4 °C,-20 °C
Storage Comment:	At -20°C for one year from date of receipt. After reconstitution, at 4°C for one month. It can also be aliquotted and stored frozen at -20°C for six months. Avoid repeated freezing and thawing.