YARS polyclonal antibody

Catalog # PAB2978 Size 400 uL

Applications



Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections)

Formalin-fixed and paraffin-embedded human lung carcinomareacted with YARS polyclonal antibody (Cat # PAB2978), which was peroxidase-conjugated to the secondary antibody, followed by AEC staining. This data demonstrates the use of this antibody for immunohistochemistry; clinical relevance has not been evaluated.

Specification	
Product Description	Rabbit polyclonal antibody raised against synthetic peptide of YARS.
Immunogen	A synthetic peptide (conjugated with KLH) corresponding to C-terminus of human YARS.
Host	Rabbit
Reactivity	Human
Form	Liquid
Purification	Ammonium sulfate precipitation
Recommend Usage	Western Blot (1:1000) Immunohistochemistry (1:10-50) The optimal working dilution should be determined by the end user.
Storage Buffer	In PBS (0.09% sodium azide)
Storage Instruction	Store at 4°C. For long term storage 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

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Gene Info — YARS

Entrez GenelD	8565
Protein Accession#	<u>NP_003671;P54577</u>
Gene Name	YARS
Gene Alias	CMTDIC, TYRRS, YRS, YTS
Gene Description	tyrosyl-tRNA synthetase
Omim ID	<u>603623</u> <u>608323</u>
Gene Ontology	Hyperlink
Gene Summary	Aminoacyl-tRNA synthetases catalyze the aminoacylation of tRNA by their cognate amino acid. B ecause of their central role in linking amino acids with nucleotide triplets contained in tRNAs, amin oacyl-tRNA synthetases are thought to be among the first proteins that appeared in evolution. Tyro syl-tRNA synthetase belongs to the class I tRNA synthetase family. Cytokine activities have also b een observed for the human tyrosyl-tRNA synthetase, after it is split into two parts, an N-terminal fr agment that harbors the catalytic site and a C-terminal fragment found only in the mammalian enzy me. The N-terminal fragment is an interleukin-8-like cytokine, whereas the released C-terminal fragment is an EMAP II-like cytokine. [provided by RefSeq
Other Designations	OTTHUMP0000004027 tyrosine tRNA ligase 1, cytoplasmic

Publication Reference

Gain-of-function mutational activation of human tRNA synthetase procytokine.

Yang XL, Kapoor M, Otero FJ, Slike BM, Tsuruta H, Frausto R, Bates A, Ewalt KL, Cheresh DA, Schimmel P.

Chemistry & Biology 2007 Dec; 14(12):1323.

Application: WB-Tr, Human, HUVECs



Disrupted function and axonal distribution of mutant tyrosyl-tRNA synthetase in dominant intermediate Charcot-Marie-Tooth neuropathy.

Jordanova A, Irobi J, Thomas FP, Van Dijck P, Meerschaert K, Dewil M, Dierick I, Jacobs A, De Vriendt E, Guergueltcheva V, Rao CV, Tournev I, Gondim FA, D'Hooghe M, Van Gerwen V, Callaerts P, Van Den Bosch L, Timmermans JP, Robberecht W, Gettemans J, Thevelein JM, De Jonghe P, Kremensky I, Timmerman V.

Nature Genetics 2006 Feb; 38(2):197.

Application: IF, Mouse, N2a cells

• <u>Toward the full set of human mitochondrial aminoacyl-tRNA synthetases: characterization of AspRS and</u> <u>TyrRS.</u>

Bonnefond L, Fender A, Rudinger-Thirion J, Giege R, Florentz C, Sissler M. Biochemistry 2005 Mar; 44(12):4805.

Pathway

<u>Aminoacyl-tRNA biosynthesis</u>