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9F, No. 108, Jhouzih St.,Taipei, Taiwan Tel: + 886-2-8751-1888 Fax: + 886-2-6602-1218 E-mail: sales@abnova.com

## Datasheet

## YARS polyclonal antibody

Catalog Number: PAB2977

Regulatory Status: For research use only (RUO)

**Product Description:** Rabbit polyclonal antibody raised against synthetic peptide of YARS.

**Immunogen:** A synthetic peptide (conjugated with KLH) corresponding to N-terminus of human YARS.

Host: Rabbit

Reactivity: Human

**Applications:** WB-Ce (See our web site product page for detailed applications information)

**Protocols:** See our web site at http://www.abnova.com/support/protocols.asp or product page for detailed protocols

Form: Liquid

Purification: Ammonium sulfate precipitation

**Recommend Usage:** Western Blot (1:1000) 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.

Entrez GenelD: 8565

Gene Symbol: YARS

Gene Alias: CMTDIC, TYRRS, YRS, YTS

**Gene Summary:** Aminoacyl-tRNA synthetases catalyze the aminoacylation of tRNA by their cognate amino acid. Because of their central role in linking amino acids with nucleotide triplets contained in tRNAs, aminoacyl-tRNA synthetases are thought to be among the first proteins that appeared in evolution. Tyrosyl-tRNA synthetase belongs to the class I tRNA synthetase family. Cytokine activities have also been observed for the human tyrosyl-tRNA synthetase, after it is split into two parts, an N-terminal fragment that harbors the catalytic site and a C-terminal fragment found only in the mammalian enzyme. 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]

## **References:**

1. 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. Chem Biol. 2007 Dec;14(12):1323-33.

2. 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. Nat Genet. 2006 Feb;38(2):197-202. Epub 2006 Jan 22.

3. Toward the full set of human mitochondrial aminoacyl-tRNA synthetases: characterization of AspRS and TyrRS. Bonnefond L, Fender A, Rudinger-Thirion J, Giege R, Florentz C, Sissler M. Biochemistry. 2005 Mar 29:44(12):4805-16.