abcam

Product datasheet

Anti-Glutamyl Prolyl tRNA synthetase/PARS antibody ab157122

2 Images

Overview

Product name	Anti-Glutamyl Prolyl tRNA synthetase/PARS antibody
Description	Rabbit polyclonal to Glutamyl Prolyl tRNA synthetase/PARS
Host species	Rabbit
Tested applications	**Suitable for:** WB, IP
Species reactivity	**Reacts with:** Mouse, Human **Predicted to work with:** Chimpanzee, Cynomolgus monkey, Rhesus monkey, Gorilla, Common marmoset, Orangutan
Immunogen	Synthetic peptide corresponding to Human Glutamyl Prolyl tRNA synthetase/PARS aa 950-1000. Database link: **NP_004437.2**
Positive control	293T, HeLa, Jurkat, TCMK1 and NIH3T3 whole cell lysates
General notes	This product was previously labelled as Glutamyl Prolyl tRNA synthetase

The Life Science industry has been in the grips of a reproducibility crisis for a number of years. Abcam is leading the way in addressing this with our range of recombinant monoclonal antibodies and knockout edited cell lines for gold-standard validation. Please check that this product meets your needs before purchasing.

If you have any questions, special requirements or concerns, please send us an inquiry and/or contact our Support team ahead of purchase. Recommended alternatives for this product can be found below, along with publications, customer reviews and Q&As

Properties

Form	Liquid
Storage instructions	Shipped at 4°C. Store at +4°C.
Storage buffer	pH: 7 Preservative: 0.09% Sodium azide Constituent: 99% Tris citrate/phosphate pH 7 to 8

Purity	Immunogen affinity purified
Purification notes	ab157122 is affinity purified using an epitope specific to Glutamyl Prolyl tRNA synthetase/PARS immobilized on solid support.
Clonality	Polyclonal
Isotype	IgG

Applications

The Abpromise guarantee Our **Abpromise guarantee** covers the use of ab157122 in the following tested applications.

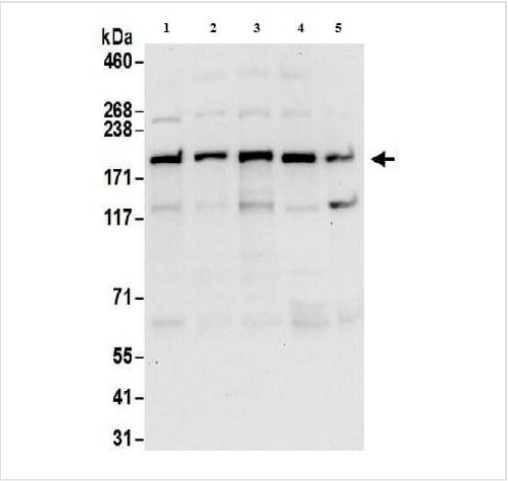
The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Application	Abreviews	Notes
WB		1/2000 - 1/10000. Predicted molecular weight: 171 kDa.
IP		Use at 2-10 µg/mg of lysate.

Target

Function	Catalyzes the attachment of the cognate amino acid to the corresponding tRNA in a two-step reaction: the amino acid is first activated by ATP to form a covalent intermediate with AMP and is then transferred to the acceptor end of the cognate tRNA.
Sequence similarities	In the N-terminal section; belongs to the class-I aminoacyl-tRNA synthetase family. In the C-terminal section; belongs to the class-II aminoacyl-tRNA synthetase family. Contains 3 WHEP-TRS domains.
Domain	The WHEP-TRS domain is involved in RNA binding.
Post-translational modifications	Phosphorylated at Ser-886 by CDK5 in a IFN-gamma-dependent manner; this phosphorylation activates assembly of the GAIT (IFN-gamma-activated inhibitor of translation) complex, which suppresses expression of a post-transcriptional regulon of proinflammatory genes in myeloid cells.

Images



Western blot - Anti-Glutamyl Prolyl tRNA synthetase/PARS antibody (ab157122)

All lanes : Anti-Glutamyl Prolyl tRNA synthetase/PARS antibody (ab157122) at 0.1 µg/ml

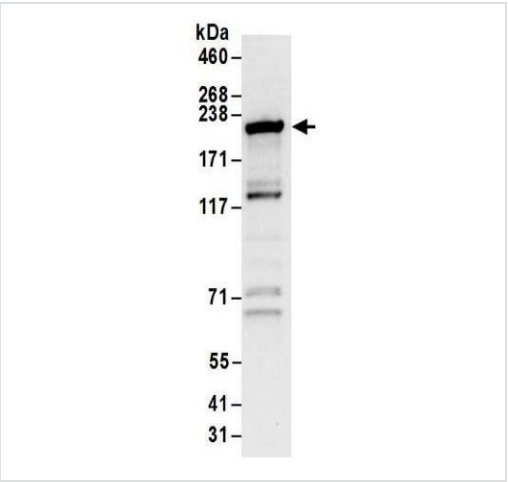
Lane 1 : 293T whole cell lysate
Lane 2 : HeLa whole cell lysate
Lane 3 : Jurkat whole cell lysate
Lane 4 : TCMK1 whole cell lysate
Lane 5 : NIH 3T3 whole cell lysate

Lysates/proteins at 50 µg per lane.

Developed using the ECL technique.

Predicted band size: 171 kDa

Exposure time: 10 seconds



Immunoprecipitation - Anti-Glutamyl Prolyl tRNA synthetase/PARS antibody (ab157122)

Detection of Glutamyl Prolyl tRNA synthetase/PARS by Western Blot of Immunprecipitate.

ab157122 at 1 &microg/ml labeling Glutamyl Prolyl tRNA synthetase/PARS in 293T whole cell lysate immunoprecipitated using ab157122 at 6 &microg/mg lysate (1 mg/IP; 20% of IP loaded/lane).

Detection: Chemiluminescence with exposure time of 10 seconds

Please note: All products are "FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES"

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