



COSMO BIO CO., LTD.
Inspiration for Life Science

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Catalog No. CBX00147

Mouse monoclonal antibody

Anti-Human **YARS**

■ Formulation

Mouse monoclonal anti-human **YARS** antibody
in PBS (3.0 mM KCl, 1.5 mM KH_2PO_4 ,
140 mM NaCl, 8.0 mM Na_2HPO_4 (pH 7.4))
containing 1% bovine serum albumin (BSA)
and 0.05% sodium azide (NaN_3).

■ Antibody concentration

100 $\mu\text{g/ml}$

■ Storage

Store at 2-8°C for up to one year.
We recommend storing at -20°C for long-term storage.
Avoid repeat freezing and thawing cycles.

■ Preparation

This antibody was purified using protein G column
chromatography from culture supernatant of hybridoma
cultured in a medium containing bovine IgG-depleted
(approximately 95%) fetal bovine serum.

■ Sterility

0.22 μm membrane

■ Applications

WB, IP, IC, Dot Blot

■ Disposal

This antibody solution contains sodium azide (NaN_3)
as a preservative. There is a potential hazard that
 NaN_3 reacts with copper or lead to produce an expl-
osive compound. For safe disposal, the vial has to
be washed thoroughly with water.

■ Safety warnings and precautions

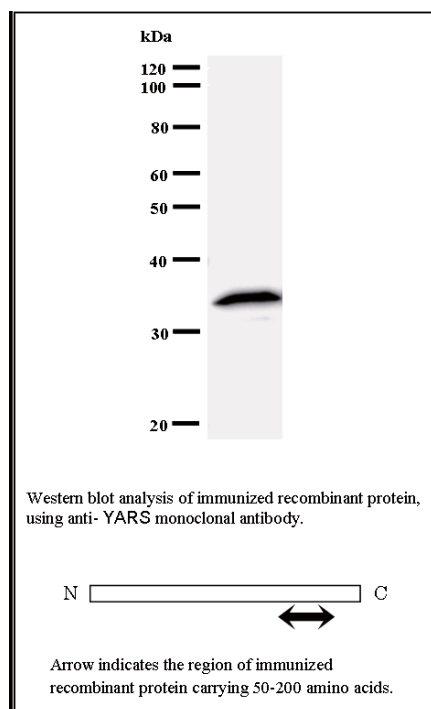
Caution must be taken to avoid contact with skin or eyes. In such a case, rinse thoroughly at once with water.
Do not ingest, inhale, or swallow. Seek medical attention immediately.
Wear appropriate protective clothing such as laboratory overalls, safety glasses and gloves.
It is strongly advised that this product should be handled by people who have been well trained in
laboratory techniques and that it is handled with care pursuant to the principles of good laboratory practice.
All chemicals are deemed potentially harmful.
The vial is prone to fall over. Use caution, especially when the lid is off.

Lot No. **YAR5H08-2**

Clone No. **YAR5H08**

Antibody class : **IgG1**

Immunogen : Recombinant



FOR RESEARCH USE ONLY, NOT FOR USE IN DIAGNOSTIC PROCEDURES.

manufactured by BMR



Catalog No. CBX00147

Mouse monoclonal antibody

Anti-Human YARS

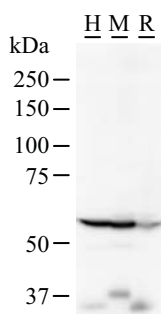
Background

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. [NCBI Entrez Gene Summary]

Recommended condition

WB: 0.2-2 µg/ml IP: 100-500 µg/sample FC: 0.5-2 µg/sample ICC: 2-100 µg/ml

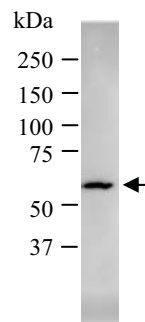
Application



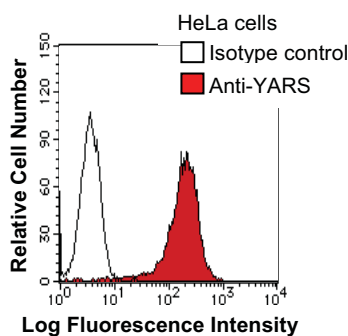
Detection of YARS by Western blot.

Samples: Whole cell lysate from human HeLa (H, 50 µg), mouse NIH3T3 (M, 50 µg) and rat F2408 (R, 50 µg) cells. [Lot No. YAR5H08-2]

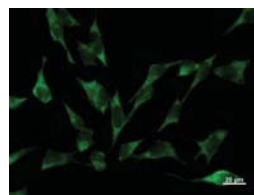
Predicted molecular weight: 59 kDa



Immunoprecipitation: RIPA lysate of HeLa cells was incubated with anti-YARS mAb. [Lot No. YAR5H08-2]



HeLa cells were fixed in 2% paraformaldehyde/PBS and then permeabilized in 90% methanol. Cells were stained with anti-YARS mAb (shaded) or isotype control (unshaded) followed by Alexa Fluor® 488-conjugated goat anti-mouse IgG. [Lot No. YAR5H08-2]



Immunostaining analysis in HeLa cells. HeLa cells were fixed with 4% paraformaldehyde and permeabilized with 0.1% Triton X-100 in PBS. The cells were immunostained with anti-YARS mAb. [Lot No. YAR5H08-1]