

FARSLB (J-02): sc-100985

BACKGROUND

Aminoacyl-tRNA synthetases are a class of enzymes that add specific amino acid residues to various tRNAs. FARSLB (phenylalanine-tRNA ligase β chain), also known as FARSB, FRSB, PheHB or PheRS, is a 589 amino acid cytoplasmic protein that is the regulatory β subunit of phenylalanine-tRNA synthetase. A highly conserved member of the aminoacyl-tRNA synthetase class IIc sub-family, FARSLB functions to enzymatically attach L-phenylalanine residues to terminal adenosines on tRNA^{Phe}. This is an ATP-dependent reaction that yields AMP, a diphosphate and an L-phenylalanine-tagged tRNA^{Phe}. FARSLB is expressed in brain, heart, kidney, pancreas, placenta and skeletal muscle and its expression is increased in malignant cell lines, suggesting a possible role for FARSLB in carcinogenesis.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: FARSB (human) mapping to 2q36.1.

SOURCE

FARSLB (J-02) is a mouse monoclonal antibody raised against recombinant FARSLB of human origin.

PRODUCT

Each vial contains 100 μ g IgG_{2a} kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

APPLICATIONS

FARSLB (J-02) is recommended for detection of FARSLB of human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 μ g per 100-500 μ g of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500), immunohistochemistry (including paraffin-embedded sections) (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Suitable for use as control antibody for FARSLB siRNA (h): sc-94531, FARSLB shRNA Plasmid (h): sc-94531-SH and FARSLB shRNA (h) Lentiviral Particles: sc-94531-V.

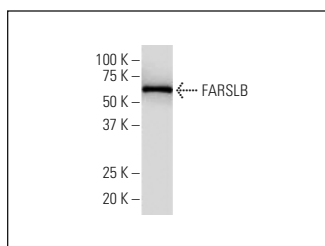
Molecular Weight of FARSLB: 66 kDa.

Positive Controls: Hep G2 cell lysate: sc-2227.

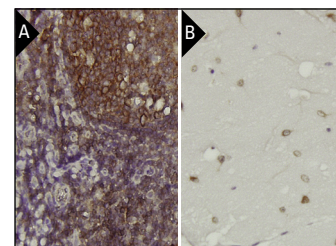
RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended: 1) Western Blotting: use m-IgG κ BP-HRP: sc-516102 or m-IgG κ BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), Cruz Marker™ Molecular Weight Standards: sc-2035, UltraCruz® Blocking Reagent: sc-516214 and Western Blotting Luminol Reagent: sc-2048. 2) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) Immunofluorescence: use m-IgG κ BP-FITC: sc-516140 or m-IgG κ BP-PE: sc-516141 (dilution range: 1:50-1:200) with UltraCruz® Mounting Medium: sc-24941 or UltraCruz® Hard-set Mounting Medium: sc-359850. 4) Immunohistochemistry: use m-IgG κ BP-HRP: sc-516102 with DAB, 50X: sc-24982 and Immunohistomount: sc-45086, or Organo/Limonene Mount: sc-45087.

DATA



FARSLB (J-02): sc-100985. Western blot analysis of FARSLB expression in Hep G2 whole cell lysate.



FARSLB (J-02): sc-100985. Immunoperoxidase staining of formalin-fixed, paraffin-embedded human tonsil tissue showing membrane and cytoplasmic localization (A). Immunoperoxidase staining of formalin-fixed, paraffin-embedded human tonsil tissue showing membrane and cytoplasmic localization (B).

STORAGE

Store at 4° C, **DO NOT FREEZE**. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

RESEARCH USE

For research use only, not for use in diagnostic procedures.