

TyrRS (m3): 293T Lysate: sc-126172

BACKGROUND

Tryptophanyl-tRNA synthetases are essential enzymes that catalyze the aminoacylation of tRNA^{Trp} with tryptophan, an essential function of the cell's protein synthesis machinery. Two forms of tryptophanyl-tRNA synthetase exist; a cytoplasmic form, named TrpRS (also known as WARS), and a mitochondrial form, named WARS2. In normal cells, human TrpRS exists as a full length form and as a truncated form designated mini TrpRS, which is produced by alternative splicing. Expression of mini TrpRS is highly stimulated in human cells by the addition of IFN- γ . Although both human full length TrpRS and mini TrpRS are enzymatically active in aminoacylation, they differ in angiostatic activity. The tyrosyl-tRNA synthetase (TyrRS), a protein related to TrpRS, exists as a homodimeric enzyme that catalyzes the aminoacylation of tRNA^{Tyr} by L-tyrosine.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: Yars (mouse) mapping to 4 D2.2.

PRODUCT

TyrRS (m3): 293T Lysate represents a lysate of mouse TyrRS transfected 293T cells and is provided as 100 μ g protein in 200 μ l SDS-PAGE buffer.

STORAGE

Store at -20° C. Repeated freezing and thawing should be minimized. Sample vial should be boiled once prior to use. Non-hazardous. No MSDS required.

APPLICATIONS

TyrRS (m3): 293T Lysate is suitable as a Western Blotting positive control for mouse reactive TyrRS antibodies. Recommended use: 10-20 μ l per lane.

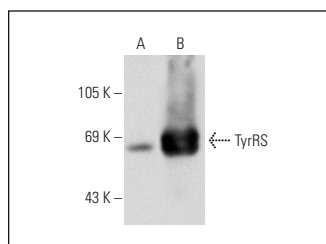
Control 293T Lysate: sc-117752 is available as a Western Blotting negative control lysate derived from non-transfected 293T cells.

TyrRS (H-11): sc-166741 is recommended as a positive control antibody for Western Blot analysis of enhanced mouse TyrRS expression in TyrRS transfected 293T cells (starting dilution 1:100, dilution range 1:100-1:1,000).

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.

DATA



TyrRS (H-11): sc-166741. Western blot analysis of TyrRS expression in non-transfected: sc-117752 (A) and mouse TyrRS transfected: sc-126172 (B) 293T whole cell lysates.

RESEARCH USE

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

PROTOCOLS

See our web site at www.scbt.com for detailed protocols and support products.