

TyrRS (h2): 293T Lysate: sc-170741

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 (human) mapping to 1p35.1.

PRODUCT

TyrRS (h2): 293T Lysate represents a lysate of human TyrRS transfected 293T cells and is provided as 100 μ g protein in 200 μ l SDS-PAGE buffer.

APPLICATIONS

TyrRS (h2): 293T Lysate is suitable as a Western Blotting positive control for human 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.

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.

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.