# SANTA CRUZ BIOTECHNOLOGY, INC.

# TAT (G-13): sc-109066



## BACKGROUND

TAT (tyrosine aminotransferase) is a 454 amino acid protein that localizes to mitochondria and belongs to the class-l pyridoxal-phosphate-dependent aminotransferase family. Existing as a homodimer, TAT uses pyridoxal phosphate as a cofactor to catalyze the conversion of L-tyrosine into p-hydroxyphenyl-pyruvate, a reaction that is important in amino acid degradation. Defects in the gene encoding TAT are the cause of tyrosinemia type 2 (TYRO2), an inborn error of metabolism that is associated with elevated levels of tyrosine in blood and urine and is characterized by palmoplantar keratosis, painful corneal ulcers and mental retardation. The gene encoding TAT maps to human chromosome 16, which encodes over 900 genes and comprises nearly 3% of the human genome.

### REFERENCES

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#### CHROMOSOMAL LOCATION

Genetic locus: TAT (human) mapping to 16q22.3; Tat (mouse) mapping to 8 D3.

# SOURCE

TAT (G-13) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of TAT of human origin.

# **RESEARCH USE**

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

### PRODUCT

Each vial contains 200  $\mu g$  lgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-109066 P, (100  $\mu$ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

# **APPLICATIONS**

TAT (G-13) is recommended for detection of TAT of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

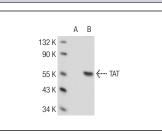
TAT (G-13) is also recommended for detection of TAT in additional species, including canine.

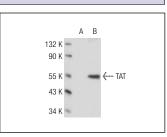
Suitable for use as control antibody for TAT siRNA (h): sc-93382, TAT siRNA (m): sc-154082, TAT shRNA Plasmid (h): sc-93382-SH, TAT shRNA Plasmid (m): sc-154082-SH, TAT shRNA (h) Lentiviral Particles: sc-93382-V and TAT shRNA (m) Lentiviral Particles: sc-154082-V.

Molecular Weight of TAT: 50 kDa.

Positive Controls: TAT (m8): 293T Lysate: sc-123924.

#### DATA





TAT (G-13): sc-109066. Western blot analysis of TAT expression in non-transfected: sc-117752 (**A**) and mouse TAT transfected: sc-123924 (**B**) 293T whole cell lysates.

TAT (G-13): sc-109066. Western blot analysis of TAT expression in non-transfected: sc-117752 (**A**) and mouse TAT transfected: sc-123923 (**B**) 293T whole cell lysates.

## **STORAGE**

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

#### **PROTOCOLS**

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

MONOS Satisfation Guaranteed

Try **TAT (H-9):** sc-376292 or **TAT (A-6):** sc-374065, our highly recommended monoclonal alternatives to TAT (G-13).