Asparagine synthetase (F-3): sc-376151

**BACKGROUND**

Glutamine-hydrolyzing Asparagine synthetase is also commonly designated cell cycle control protein TS11. Asparagine synthetase plays an important role in the amino-acid biosynthesis pathway and is also important for L-asparagine biosynthesis. Via the L-glutamine route, it is involved in the synthesis of L-asparagine from L-aspartate. The protein contains one Asparagine synthetase biosynthesis. Via the L-glutamine route, it is involved in the synthesis of L-asparagine from L-aspartate. The protein contains one Asparagine synthetase domain and one type-2 glutamine amidotransferase domain. The cell-cycle regulated gene encoding for Asparagine synthetase, ts11, is necessary for G1 progression.

**REFERENCES**


**CHROMOSOMAL LOCATION**

Genetic locus: ASNS (human) mapping to 7q21.3; Asns (mouse) mapping to 6 A1.

**SOURCE**

Asparagine synthetase (F-3) is a mouse monoclonal antibody raised against amino acids 1-250 mapping at the N-terminus of Asparagine synthetase of human origin.

**PRODUCT**

Each vial contains 200 µg IgG2b kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

**STORAGE**

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

**APPLICATIONS**

Asparagine synthetase (F-3) is recommended for detection of Asparagine synthetase of mouse, rat and human origin by Western Blotting (starting dilution 1:100, 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).


Molecular Weight of Asparagine synthetase: 64 kDa.

Positive Controls: BYDP whole cell lysate: sc-364368, K-562 whole cell lysate: sc-2203 or Jurkat whole cell lysate: sc-2204.

**RECOMMENDED SUPPORT REAGENTS**

To ensure optimal results, the following support reagents are recommended:

1) Western Blotting: use m-IgG1 or m-IgG2a HRP: sc-516102 or m-IgG1 or m-IgG2a 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 Luminal Reagent: sc-2048. 2) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) Immunofluorescence: use m-IgG1 BP-PE: sc-516140 or m-IgG1 BP-PE: sc-516141 (dilution range: 1:50-1:200) with UltraCruz® Mounting Medium: sc-24941 or UltraCruz® Hard-set Mounting Medium: sc-359850.

**DATA**

Asparagine synthetase (F-3): sc-376151. Western blot analysis of Asparagine synthetase expression in BYDP (A), Neuro-2A (B) and PC-12 (C) whole cell lysates.

Asparagine synthetase (F-3): sc-376151. Western blot analysis of Asparagine synthetase expression in K-562 (A) and Jurkat (B) whole cell lysates.

**PROTOCOLS**

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