MAFbx (F-9): sc-166806

BACKGROUND

Muscle atrophy F-box (MAFbx) is an E3 ubiquitin ligase that initiates ATP-dependent ubiquitin-mediated proteolysis and promotes muscle atrophy. MAFbx transcript is abundant in cardiac and skeletal muscle undergoing atrophy. MAFbx-/- mice are resistant to muscle atrophy. MAFbx is thought to recognize and bind to some phosphorylated proteins and promote their ubiquitination and degradation during skeletal muscle atrophy. MAFbx interacts with MyoD by ubiquitination via a sequence found in transcriptional co-activators and therefore may play an important role in the course of muscle differentiation by determining the abundance of MyoD. MAFbx is specifically expressed in cardiac and skeletal muscle.

REFERENCES


CHROMOSOMAL LOCATION

Genetic locus: FBXO32 (human) mapping to 8q24.13, FBXO25 (human) mapping to 8p23.3; Fbxo32 (mouse) mapping to 15 D1, Fbxo25 (mouse) mapping to 8 A1.1.

SOURCE

MAFbx (F-9) is a mouse monoclonal antibody raised against amino acids 1-300 mapping at the N-terminus of MAFbx of human origin.

PRODUCT

Each vial contains 200 µg IgG1 kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

APPLICATIONS

MAFbx (F-9) is recommended for detection of MAFbx isoforms 1-3 and FBXO25 isoforms 1 and 2 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 MAFbx: 42 kDa.

Positive Controls: MAFbx (m): 293T Lysate: sc-121485.

RECOMMENDED SUPPORT REAGENTS

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

DATA

MAFbx (F-9): sc-166806. Western blot analysis of MAFbx expression in non-transfected: sc-117752 (A) and mouse MAFbx transfected: sc-121485 (B) 293T whole cell lysates.

MAFbx (F-9): sc-166806. Immunofluorescence staining of formalin-fixed HepG2 cells showing cytoplasmic localization.

SELECT PRODUCT CITATIONS


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.

PROTOCOLS

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