

Emi2 (H-62): sc-68894

BACKGROUND

F-box proteins are critical components of the SCF (Skp1-CUL-1-F-box protein) type E3 ubiquitin ligase complex and are involved in substrate recognition and recruitment for ubiquitination. They are members of a larger family of proteins that are involved in the regulation of a wide variety of cellular processes (including the cell cycle, immune responses, signaling cascades and developmental events) through the targeting of proteins, such as cyclins, cyclin-dependent kinase inhibitors, κ B- α and β -catenin, for proteasomal degradation. Emi2 (endogenous meiotic inhibitor 2), also known as FBXO43 (F-box only protein 43) or ERP1, is a 708 amino acid protein that contains one F-box domain and one IBR-type zinc finger. Playing an important role in protein modification, Emi2 is required for the establishment and maintenance of oocyte arrest at the second meiotic metaphase, an event that is crucial for fertilization. Specifically, Emi2 is thought to induce meiotic arrest by inhibiting the activity of the APC (anaphase-promoting complex), thereby preventing the progression of meiosis. Emi2 is subject to phosphorylation and ubiquitination, both of which promote its degradation by the proteasome.

CHROMOSOMAL LOCATION

Genetic locus: FBXO43 (human) mapping to 8q22.2; Fbxo43 (mouse) mapping to 15 B3.1.

SOURCE

Emi2 (H-62) is a rabbit polyclonal antibody raised against amino acids 482-543 mapping near the C-terminus of Emi2 of human origin.

PRODUCT

Each vial contains 200 μ g IgG 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

Emi2 (H-62) is recommended for detection of Emi2 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 μ g per 100-500 μ g of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500), immunohistochemistry (including paraffin-embedded sections) (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Emi2 (H-62) is also recommended for detection of Emi2 in additional species, including equine, canine, bovine and porcine.

Suitable for use as control antibody for Emi2 siRNA (h): sc-77268, Emi2 siRNA (m): sc-77269, Emi2 shRNA Plasmid (h): sc-77268-SH, Emi2 shRNA Plasmid (m): sc-77269-SH, Emi2 shRNA (h) Lentiviral Particles: sc-77268-V and Emi2 shRNA (m) Lentiviral Particles: sc-77269-V.

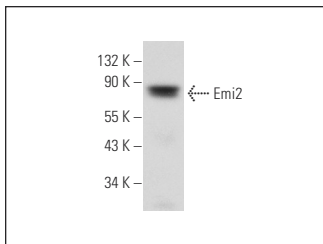
Molecular Weight of Emi2: 71 kDa.

Positive Controls: U-938-M whole cell lysate.

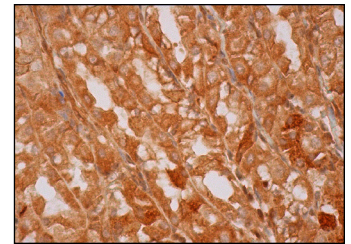
RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use goat anti-rabbit IgG-HRP: sc-2004 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible goat anti-rabbit IgG-HRP: sc-2030 (dilution range: 1:2000-1:5000), Cruz Marker™ Molecular Weight Standards: sc-2035, TBS Blotto A Blocking Reagent: sc-2333 and Western Blotting Luminol Reagent: sc-2048. 2) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) Immunofluorescence: use goat anti-rabbit IgG-FITC: sc-2012 (dilution range: 1:100-1:400) or goat anti-rabbit IgG-TR: sc-2780 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941. 4) Immunohistochemistry: use ImmunoCruz™: sc-2051 or ABC: sc-2018 rabbit IgG Staining Systems.

DATA



Emi2 (H-62): sc-68894. Western blot analysis of Emi2 expression in U-938-M whole cell lysate.



Emi2 (H-62): sc-68894. Immunoperoxidase staining of formalin fixed, paraffin-embedded human upper stomach tissue showing cytoplasmic and nuclear staining of glandular cells.

RESEARCH USE

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

PROTOCOLS

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



Try **Emi2 (4B6): sc-517089**, our highly recommended monoclonal alternative to Emi2 (H-62).