

## Emi1 (C-21): sc-23269

### BACKGROUND

Emi1 (for early mitotic inhibitor) regulates mitosis by inhibiting the anaphase promoting complex/cyclosome (APC). Emi1 is a conserved F box protein containing a zinc binding region essential for APC inhibition. The Emi1 protein functions to promote cyclin A accumulation and S phase entry in somatic cells by inhibiting the APC complex. At the G<sub>1</sub>-S transition, Emi1 is transcriptionally induced by the E2F transcription factor. Emi1 overexpression accelerates S phase entry and can override a G<sub>1</sub> block caused by overexpression of Cdh1 or the E2F-inhibitor p105 retinoblastoma protein (pRb). Depleting cells of Emi1 through RNA interference prevents accumulation of cyclin A and inhibits S phase entry. Emi1 is required to arrest unfertilized eggs at metaphase of meiosis II and may be the long-sought mediator of CSF activity. Human Emi1 is similar to *Xenopus laevis* Emi1, which inhibits the APC (Cdc20) ubiquitination complex to allow accumulation of cyclin B.

### CHROMOSOMAL LOCATION

Genetic locus: FBX05 (human) mapping to 6q25.2.

### SOURCE

Emi1 (C-21) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the C-terminus of Emi1 of human origin.

### PRODUCT

Each vial contains 200 µg IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-23269 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

### STORAGE

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

### APPLICATIONS

Emi1 (C-21) is recommended for detection of Emi1 of human, and, to a lesser extent, mouse 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).

Emi1 (C-21) is also recommended for detection of Emi1 in additional species, including canine.

Suitable for use as control antibody for Emi1 siRNA (h): sc-37611, Emi1 siRNA (m): sc-44344, Emi1 shRNA Plasmid (h): sc-37611-SH, Emi1 shRNA Plasmid (m): sc-44344-SH, Emi1 shRNA (h) Lentiviral Particles: sc-37611-V

and Emi1 shRNA (m) Lentiviral Particles: sc-44344-V.

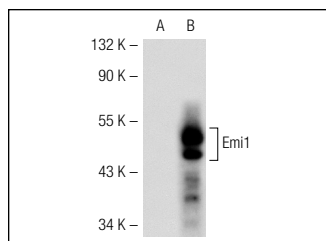
Molecular Weight of Emi1: 56 kDa.

Positive Controls: Emi1 (m): 293T Lysate: sc-120019, K-562 whole cell lysate: sc-2203 or HeLa whole cell lysate: sc-2200.

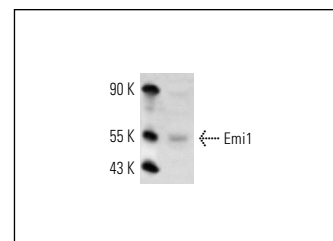
### RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use donkey anti-goat IgG-HRP: sc-2020 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible donkey anti-goat IgG-HRP: sc-2033 (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 donkey anti-goat IgG-FITC: sc-2024 (dilution range: 1:100-1:400) or donkey anti-goat IgG-TR: sc-2783 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

### DATA



Emi1 (C-21): sc-23269. Western blot analysis of Emi1 expression in non-transfected: sc-117752 (A) and mouse Emi1 transfected: sc-120019 (B) 293T whole cell lysates.



Emi1 (C-21): sc-23269. Western blot analysis of Emi1 expression in K-562 whole cell lysate.

### RESEARCH USE

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

### PROTOCOLS

See our web site at [www.scbt.com](http://www.scbt.com) or our catalog for detailed protocols and support products.

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Try **Emi1 (B-3): sc-365212**, our highly recommended monoclonal alternative to Emi1 (C-21).