

## Eme2 (Q-12): sc-164270

### BACKGROUND

Eme2, also known as probable crossover junction endonuclease Eme2, is a 379 amino acid nuclear protein. As a member of the Eme2/Mms4 family, Eme2 associates with MUS81 to constitute a DNA structure-specific endonuclease. The MUS81-Eme2 complex cleaves branched DNA structures, especially those arising during stalled DNA replication such as replication forks and 3' DNA flaps. Expressed as two alternatively spliced isoforms, Eme2 is encoded by a gene located on human chromosome 16, which encodes over 900 genes and comprises nearly 3% of the human genome. Defects in the gene encoding WDR59 may be associated with the rare disorder Rubinstein-Taybi syndrome or Crohn's disease, which is a gastrointestinal inflammatory condition.

### REFERENCES

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### CHROMOSOMAL LOCATION

Genetic locus: EME2 (human) mapping to 16p13.3; Eme2 (mouse) mapping to 17 A3.3.

### STORAGE

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

### SOURCE

Eme2 (Q-12) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of Eme2 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-164270 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

### APPLICATIONS

Eme2 (Q-12) is recommended for detection of Eme2 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), 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); non cross-reactive with Eme1.

Suitable for use as control antibody for EME2 siRNA (h): sc-93006, EME2 shRNA Plasmid (h): sc-93006-SH and EME2 shRNA (h) Lentiviral Particles: sc-93006-V.

Molecular Weight of Eme2 isoform 1: 41 kDa.

Molecular Weight of Eme2 isoform 2: 26 kDa.

### 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) 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.

### 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.