MKP-2 (48): sc-135991

**BACKGROUND**

MKP-2 (MAP kinase phosphatase 2, dual specificity protein phosphatase 4 (DUSP4)) is a phosphatase involved in the complex MAPKK cascade. MKP-2 belongs to the protein-tyrosine phosphatase family (non-receptor class dual specificity subfamily) and contains one rhodanese domain and one tyrosine-protein phosphatase domain. A dual specificity protein phosphatase, MKP-2 has a stringent substrate specificity for MAPks. It acts to regulate mitogenic signal transduction by dephosphorylating both Thr and Tyr residues on MAP kinases ERK 1 and ERK 2. Transcription factor E2F-1, which is responsible for mediating apoptosis and suppressing tumorigenesis, acts as a transcriptional regulator of MKP-2. E2F-1 is physically associated with the MKP-2 promoter and can transactivate the promoter of the MKP-2 gene. Specifically, E2F-1 binds to a perfect palindromic motif in the MKP-2 promoter. MKP-2 is an essential cell death mediator in the E2F-1 pathway and may lead to the development of new strategies for cancer treatment.

**REFERENCES**


**APPLICATIONS**

MKP-2 (48) is recommended for detection of MKP-2 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000) and immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500); not recommended for immunoprecipitation.


Molecular Weight of MKP-2: 43 kDa.

Positive Controls: SW480 cell lysate: sc-2219, rat spleen extract: sc-2397 or RAW 264.7 whole cell lysate: sc-2211.

**DATA**

**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. Not for resale.

**PROTOCOLS**

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