

## Product Information

### Anti-phospho-MEK 7 (pSer<sup>271</sup>/Thr<sup>275</sup>)

Developed in Rabbit, Affinity Isolated Antibody

Product Number **M 4818**

#### Product Description

Anti-phospho-MEK 7 (Mitogen-Activated Protein Kinase Kinase 7 MKK7 or MEK7) (pSer<sup>271</sup>/Thr<sup>275</sup>) was developed in rabbit using a synthetic MEK 7-derived phosphopeptide that is double phosphorylated at serine 271 and threonine 275 as immunogen. The serum is affinity purified using sequential epitope-specific affinity chromatography. The antibody is preadsorbed to remove any reactivity towards the non-phosphorylated MEK7 protein

The antibody crossreacts with human MEK 7. Mouse, MEK 7 (100% homologous) have not been tested, but is expected to crossreact. This antibody does not react with other MEK isoforms. It has been used in immunoblotting applications.

Mitogen-Activated Protein Kinase Kinase 7 (MEK 7 or MKK7) is a 38 kDa member of a tyrosine/threonine protein kinase family that activates the c-Jun NH2-terminal kinases (JNK), which is part of the inflammation/stress signaling pathway.

Phosphorylation of MEK 7 by MEK1 on serine 271 and threonine 275 in the catalytic domain activates the protein and enables MEK 7 to phosphorylate JNK.

#### Reagent

The antibody is supplied as a solution in Dulbecco's phosphate buffered saline (without Mg<sup>2+</sup> and Ca<sup>2+</sup>), pH 7.3, containing 1.0 mg/ml BSA (IgG and protease free) and 0.05% sodium azide.

#### Precautions and Disclaimer

Due to the sodium azide content, a material safety data sheet (MSDS) for this product has been sent to the attention of the safety officer of your institution. Consult the MSDS for information regarding hazardous and safe handling practices.

#### Storage/Stability

Store at -70°C. For extended storage, upon initial thawing, freeze in working aliquots. Avoid repeated freezing and thawing to prevent denaturing the

antibody. Working dilution samples should be discarded if not used within 12 hours. The antibody is stable for at least 6 months when stored appropriately.

#### Product Profile

A recommended working concentration of 0.1-1.0 µg/mL is determined by immunoblotting using extracts prepared GST-tagged fusion protein expressing MEK 7.

**Note:** In order to obtain best results in different techniques and preparations we recommend determining optimal working concentration by titration test.

#### Results

##### Peptide competition

1. Extracts prepared from background extracts with GST-tagged fusion protein expressing MEK 7 added were resolved by SDS-PAGE on a 10% polyacrylamide gel and transferred to PVDF.
2. Membranes were blocked with a 5% BSA-TBST buffer overnight at 4 °C.
3. Blocked membranes were pre-incubated with different peptides, as follows:  
Lane 1 – no peptide  
Lane 2 – the non-phosphorylated peptide corresponding to immunogen  
Lane 3 – a generic peptide containing phosphoserine  
Lane 4 – generic peptide containing phosphothreonine  
Lane 5 – immunogen MEK7 double phosphorylated
4. Subsequently, membranes were incubated with 0.50 µg/mL MEK7 [pSer<sup>271</sup>/pThr<sup>275</sup>] antibody for two hours at room temperature in a 3% BSA-TBST buffer.
5. After washing, membranes were incubated with goat F(ab')<sub>2</sub> anti-rabbit IgG alkaline phosphatase and signals were detected using the Tropix WesternStar method.
6. The data show (Figure 1) that only the peptide corresponding to MEK 7 [pSer<sup>271</sup>/pThr<sup>275</sup>] blocks the antibody signal,

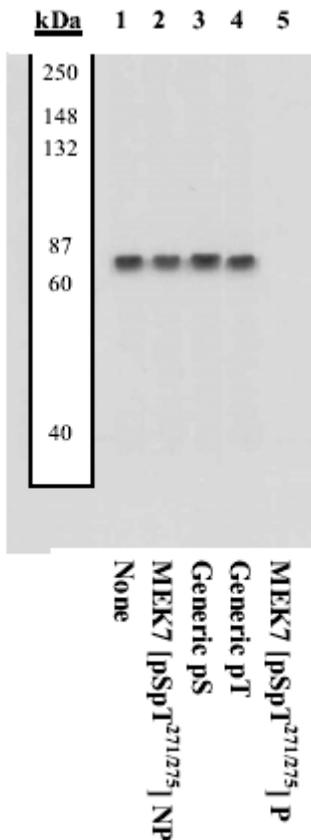


Figure 1 Peptide Competition

#### References

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