



Product Information

ANTI-SKK2 (MKK3, MEK3, SAPKK2)
Developed in Rabbit, IgG Fraction of Antiserum

Product Number **S5308**

Product Description

Anti-SKK2 (MEK3) is developed in rabbit using a GST fusion protein containing full length recombinant *Xenopus* stress activating protein kinase kinase 2 (SAPKK2, SKK2), also termed MAP kinase kinase 3 (MEK3, MKK3) as immunogen. The antibody is purified using protein A chromatography.

Anti-SKK2 reacts specifically with *Xenopus* MEK3 (38 kD) and human homologs of XMEK3, such as MEK3 and MEK6, by immunoblotting. Depending on the cell or tissue lysate used, a 25 kD protein may also be detected. It also reacts with human, mouse, rat, rabbit and bovine SKK2. Other species cross-reactivity is unknown. The antibody does not react with rabbit MEK6/SKK3.

Anti-SKK2 may be used for the detection of SKK2 by immunoblotting of a human A431, rat testes and mouse kidney cell lysates. This antibody is not recommended for immunoprecipitation.

Stress Activating Protein Kinase Kinase 2 (SKK2, SAPKK2), also termed MAP Kinase Kinase 3 (MKK3, MEK3), is 79% identical to MKK6. In response to stress-related stimuli, such as heat shock, inflammatory cytokines or hyperosmolarity, both MKK3 and MKK6 phosphorylate and activate p38 MAPK (RK, SAPK2a, CSBP) *in vitro*, but not JNK (SAPK).¹⁻³ The drugs SB202190 and SB203580 can inhibit activation of the p38 MAPK pathway. Recently, MKK3b has been discovered and is believed to be an alternatively spliced form of MKK3. MKK3b differs from MKK3 in that MKK3b contains 29 additional amino acids at the N-terminal. MKK3, MKK3b and MKK6 have been shown

to be specific activators of p38 MAPK (RK, SAPK2a, CSBP).

Reagents

The product is supplied as IgG fraction in 0.07 M tris-glycine buffer, pH 7.0, containing 30% glycerol and 0.035% sodium azide (see MSDS)* as a preservative.

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 0°C to -20°C. If slight turbidity occurs upon prolonged storage, clarify the solution by centrifugation before use.

Product Profile

Recommended working concentration is 2 µg/ml by immunoblotting using cell lysates from human A431, rat testes and mouse kidney cell lysates.

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

References

1. Derijard, B., et al., *Science*, **267**, 682 (1995).
2. Sanchez, I., et al., *Nature*, **372**, 794 (1994).
3. Han, J., et al., *J. Biol. Chem.*, **271**, 2886 (1996).

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