



## MKK6 (Phospho-Ser207) Antibody

#11146

**Catalog Number:** 11146-1, 11146-2

**Amount:** 50µg/50µl, 100µg/100µl

**Swiss-Prot No. :** P52564

**Form of Antibody:** Rabbit IgG in phosphate buffered saline (without Mg<sup>2+</sup> and Ca<sup>2+</sup>), pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol.

**Storage/Stability:** Store at -20°C/1 year

**Immunogen:** The antiserum was produced against synthesized phosphopeptide derived from Human MKK6 around the phosphorylation site of serine 207 (V-D-S<sub>P</sub>-V-A).

**Purification:** The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific phosphopeptide. The antibody against non-phosphopeptide was removed by chromatography using non-phosphopeptide corresponding to the phosphorylation site.

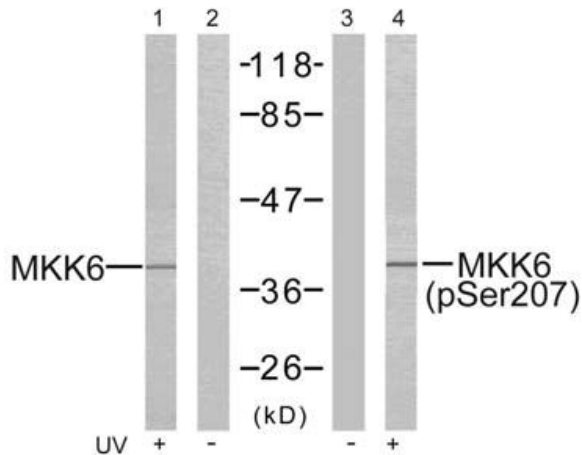
**Specificity/Sensitivity:** MKK6 (phospho-Ser207) antibody detects endogenous levels of MKK6 only when phosphorylated at serine207.

**Reactivity:** Human, Mouse, Rat

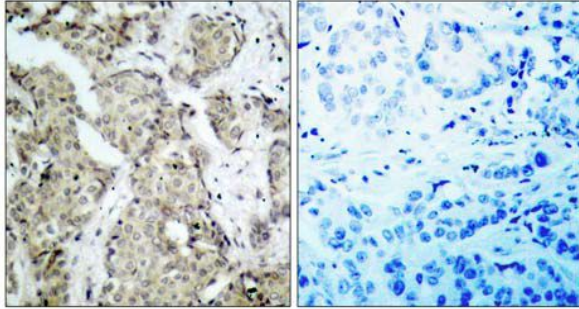
**Applications:**

Predicted MW: 41kd

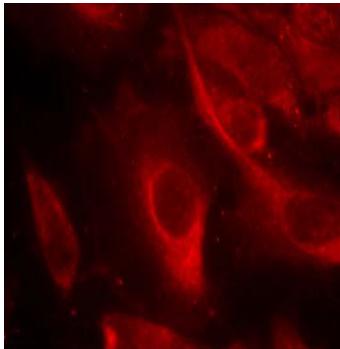
WB: 1:500~1:1000 IHC: 1:50~1:100 IF: 1:100~1:200



Western blot analysis of extract from MDA-MB-435 cells untreated or treated with UV, using MKK6 (Ab-207) antibody (#21153, Lane 1 and 2) and MKK6 (phospho-Ser207) antibody (#11146, Lane 3 and 4).



Immunohistochemical analysis of paraffin- embedded human breast carcinoma tissue using MKK6 (phospho-Ser207) antibody (#11146).



Immunofluorescence staining of methanol-fixed HeLa cells showing cytoplasmic staining using MKK6 (phospho-Ser207) antibody (#11146).

#### **Background :**

MEK6 is a member of MAPKK protein kinase family. By using degenerate oligonucleotide primers from the conserved kinase domains of MKK3 and MKK4 two human cDNAs and 1 murine cDNA encoding closely related proteins of the MKK family were cloned. The two human clones appear to be different isoforms of the same gene generated by differential splicing: the shorter clone was designated MKK6, encodes a 278-amino acid protein, while the longer clone, designated MKK6b, encodes a 334-amino acid protein. MKK6 is about 80% identical to MKK3 and 40% identical to MKK4. 1.7-kb human MKK6 transcript is highly expressed in skeletal muscle, while an MKK6b-specific probe detected mRNA bands of 1.8, 2.4, and 4.5 kb that are enriched in heart, skeletal muscle, pancreas and liver. MKK6 plays an important role in intracellular signaling pathways leading toward activation of the p38 MAP kinase . MEK6 phosphorylates and activates p38 in response to inflammatory cytokines or environmental stress. As an essential component of p38 MAPK mediated signal transduction pathway, this gene is involved in many cellular processes such as stress induced cell cycle arrest, transcription activation and apoptosis.

#### **References:**

Wang W, et al. (2002) Mol Cell Biol ; 22(10): 3389-403.

Raingaud J, et al. (1996) Mol Cell Biol; 16(3): 1247-55.