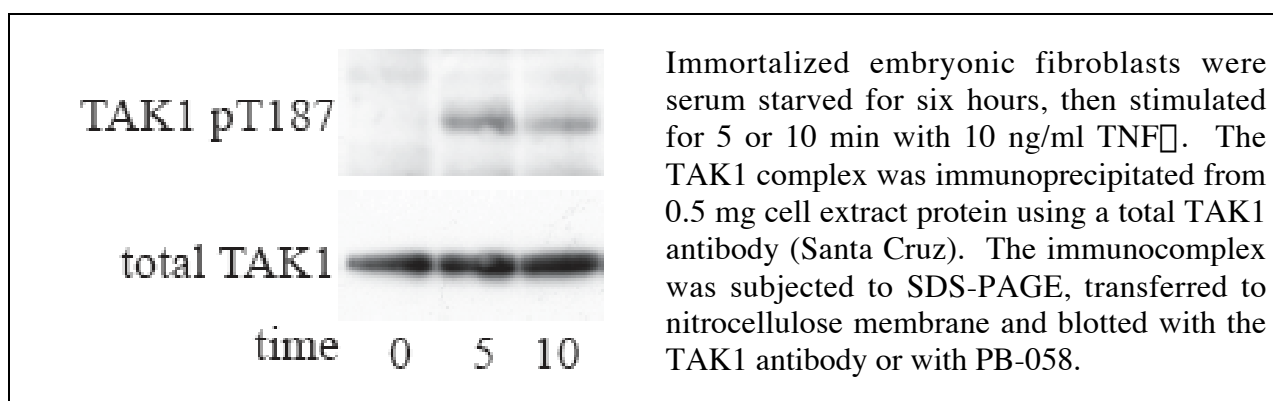


**Anti TAK1 pThr187****Anti TGF- $\beta$  activated kinase 1 pThr187****Order No. PB-058****Antibody concentration: 0.19 mg/ml****Lot No 1****Amount per vial: 100 $\mu$ g****Store at -20°C****Product description:**

Polyclonal, affinity purified antibody raised in sheep against the peptide IQTHM $\beta$ TNNKGS resembling residues 182 – 192 of human TAK1 (Acc. No. O43318), phosphorylated at Thr187. Recognizes human and mouse, other species not tested.

**Applications:** Western blotting. Phosphorylated TAK1 may only be detected by western blotting upon immunoprecipitation with a TAK1 specific antibody.

**Application advise**

Western blocking buffer: 5% dry milk, 50mM Tris pH 7.5, 150mM NaCl, 0.1% Tween.

1st Ab buffer: 1 $\mu$ g/ml antibody and 5 $\mu$ g/ml dephosphopeptide (PT-058 comes with the Ab) in western blocking buffer for 4h to 16h incubation. Wash buffer: 50mM Tris pH 7.5, 150mM NaCl, 0.1% Tween.

2nd Ab buffer: HRP coupled anti sheep Pierce 31480 (1:10000) in western blocking buffer.

## **Background information**

TAK1 is a MAPKKK, which is activated by TGF- $\beta$  and a number of cytokines and catalyses the phosphorylation and activation of MKK3 and MKK6 in these pathways (Yamaguchi et al., 1995 Science 270:2008-2011; Moriguchi et al., 1996, J. Biol. Chem 271:13675-13679.) TAK1 binds to and is regulated by TAB1, TAB2 and TAB3 (Shibuya et al., 1996 Science 272: 1179-1182). It has been suggested that TAB1 by binding to TAK1 induces a conformational change in the kinase, which then autophosphorylates several residues in the activation loop, namely Thr184, Thr187 and Ser192, thereby becoming an active enzyme (Sakurai et al., 2000, FEBS Lett. 474:141-145). PB-058 can be used to monitor the phosphorylation state of Thr187.

For in vitro use only.

For research use only.

Not for clinical use or consumption.

Not for diagnostic use.

Do not inject in humans or animals.