

## Product datasheet

# Anti-MEK1 (phospho T292) antibody ab5612

### 1 图像

#### 概述

产品名称	Anti-MEK1 (phospho T292)抗体
描述	兔多克隆抗体to MEK1 (phospho T292)
宿主	Rabbit
经测试应用	适用于: WB
种属反应性	与反应: Mouse, Rat, Human
免疫原	The antiserum was produced against a chemically synthesized phosphopeptide derived from a region of human MEK 1 that contains threonine 292.
阳性对照	NIH3T3 cells +/- PDGF.

#### 性能

形式	Liquid
存放说明	Shipped at 4°C. Upon delivery aliquot and store at -20°C. Avoid freeze / thaw cycles.
存储溶液	Preservative: 0.05% Sodium Azide Constituents: 50% Glycerol, PBS, 1mg/ml BSA. pH 7.3
纯度	Immunogen affinity purified
纯化说明	The antibody has been negatively preadsorbed using a non-phosphopeptide corresponding to the site of phosphorylation to remove antibody that is reactive with non-phosphorylated MEK 1. The final product is generated by affinity chromatography using a MEK 1 derived peptide that is phosphorylated at threonine 292.
克隆	多克隆
同种型	IgG

#### 应用

Our [Abpromise guarantee](#) covers the use of **ab5612** in the following tested applications.

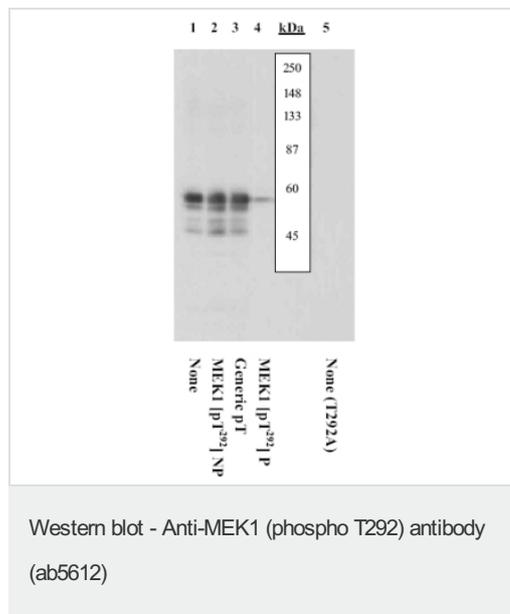
The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

应用	Ab评论	说明
WB		1/1000. Predicted molecular weight: 50 kDa.

## 靶标

功能	Catalyzes the concomitant phosphorylation of a threonine and a tyrosine residue in a Thr-Glu-Tyr sequence located in MAP kinases. Activates ERK1 and ERK2 MAP kinases.
组织特异性	Widely expressed, with extremely low levels in brain.
疾病相关	Defects in MAP2K1 are a cause of cardiofaciocutaneous syndrome (CFC syndrome) [MIM:115150]; also known as cardio-facio-cutaneous syndrome. CFC syndrome is characterized by a distinctive facial appearance, heart defects and mental retardation. Heart defects include pulmonic stenosis, atrial septal defects and hypertrophic cardiomyopathy. Some affected individuals present with ectodermal abnormalities such as sparse, friable hair, hyperkeratotic skin lesions and a generalized ichthyosis-like condition. Typical facial features are similar to Noonan syndrome. They include high forehead with bitemporal constriction, hypoplastic supraorbital ridges, downslanting palpebral fissures, a depressed nasal bridge, and posteriorly angulated ears with prominent helices. The inheritance of CFC syndrome is autosomal dominant.
序列相似性	Belongs to the protein kinase superfamily. STE Ser/Thr protein kinase family. MAP kinase kinase subfamily. Contains 1 protein kinase domain.
翻译后修饰	Phosphorylation on Ser/Thr by MAP kinase kinase kinases (RAF or MEKK1) regulates positively the kinase activity. Acetylation by Yersinia yopJ prevents phosphorylation and activation, thus blocking the MAPK signaling pathway.

## 图片



Peptide Competition and Mutant Analysis:  
Recombinant wild-type (lanes 1-4) and mutant (T292A) MEK1 (lane 5) treated with ERK to induce phosphorylation was added to background extracts and resolved by SDS PAGE on a 10% Tris-glycine gel and transferred to PVDF. Membranes were blocked with a 5% BSA-TBST buffer overnight at 4°C, then were incubated with 0.50 µg/mL ab5612 antibody for two hours at room temperature, following prior incubation with: no peptide (1, 5), the nonphosphopeptide corresponding to the immunogen (2), a generic phosphothreonine containing peptide (3), or, the phosphopeptide immunogen (4). 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. The data

snow that only the peptide corresponding to ab5612 blocks the antibody signal, and the T292A mutant is not reactive, demonstrating the specificity of the antibody. The recombinant wild-type and mutant MEK1 were kindly provided by Dr. Natalie Ahn, University of Colorado.

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