

Catalog Number: 11039-1, 11039-2

Amount: 50µg/50µl, 100µg/100µl

Swiss-Prot No. :Q02078

**Form of Antibody:** Rabbit IgG in phosphate buffered saline (without Mg2+ and Ca2+), 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 MEF2A around the phosphorylation site of threonine 312 (L-A-TP-P-V).

**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.

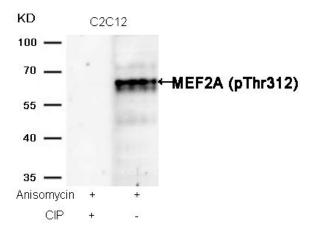
**Specificity/Sensitivity:**MEF2A (phospho-Thr312) antibody detects endogenous levels of MEF2A only when phosphorylated at threonine 312.

Reactivity: Human, Mouse, Rat

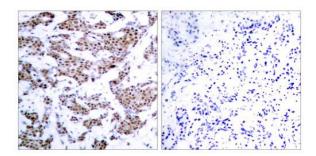
## Applications:

Predicted MW: 54kd

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



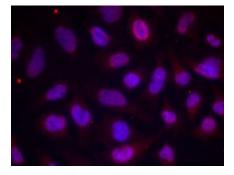
Western blot analysis of extracts from C2C12 cells, treated with Anisomycin or calf intestinal phosphatase (CIP), using MEF2A (Phospho-Thr312) Antibody #11039



Immunohistochemical analysis of paraffin-embedded

human breast carcinoma tissue, using MEF2A (phospho-

Thr312) antibody (#11039).



Immunofluorescence staining of methanol-fixed HeLa cells using MEF2A (phospho-Thr312) antibody (#11039, Red).

## Background :

The process of differentiation from mesodermal precursor cells to myoblasts has led to the discovery of a variety of tissue-specific factors that regulate muscle gene expression. The myogenic basic helix-loop-helix proteins, including myoD (MIM 159970), myogenin (MIM 159980), MYF5 (MIM 159990), and MRF4 (MIM 159991) are one class of identified factors. A second family of DNA binding regulatory proteins is the myocyte-specific enhancer factor-2 (MEF2) family. Each of these proteins binds to the MEF2 target DNA sequence present in the regulatory regions of many, if not all, muscle-specific genes. The MEF2 genes are members of the MADS gene family (named for the yeast mating type-specific transcription factor MCM1, the plant homeotic genes 'agamous' and 'deficiens' and the human serum response factor SRF (MIM 600589)), a family that also includes several homeotic genes and other transcription factors, all of which share a conserved DNA-binding domain

## References:

K Satoh, J Ohnishi, A Sato, et al. (2007) Nemo-Like Kinase-Myocyte Enhancer Factor 2A Signaling Regulates Anterior Formation in Xenopus Development. Molecular and Cellular Biology, 27(21):7623-30.

This article references the use of the #11039 in the following applications :WB