

**Orders:** 877-616-CELL (2355)  
orders@cellsignal.com

**Support:** 877-678-TECH (8324)

**Web:** info@cellsignal.com  
cellsignal.com

3 Trask Lane | Danvers | Massachusetts | 01923 | USA

**#2857** Store at -20C

## Phospho-DUSP1/MKP1 (Ser359) (125E2) Rabbit mAb

**For Research Use Only. Not for Use in Diagnostic Procedures.**

<b>Applications:</b> W, IP	<b>Reactivity:</b> H	<b>Sensitivity:</b> Endogenous	<b>MW (kDa):</b> 40	<b>Source/Isotype:</b> Rabbit IgG	<b>UniProt ID:</b> #P28562	<b>Entrez-Gene Id:</b> 1843
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### Product Usage Information

#### Application

Western Blotting  
Immunoprecipitation

#### Dilution

1:1000  
1:100

### Storage

Supplied in 10 mM sodium HEPES (pH 7.5), 150 mM NaCl, 100 µg/ml BSA, 50% glycerol and less than 0.02% sodium azide. Store at -20°C. Do not aliquot the antibody.

### Specificity/Sensitivity

Phospho-DUSP1/MKP1 (Ser359) (125E2) Rabbit mAb detects endogenous levels of DUSP1 only when phosphorylated at serine 359.

### Source / Purification

Monoclonal antibody is produced by immunizing animals with a synthetic phosphopeptide corresponding to residues surrounding Ser359 of human DUSP1.

### Background

MAP kinases are inactivated by a family of dual-specificity protein phosphatases (DUSP) that differ in their substrate specificity, tissue distribution, inducibility by extracellular stimuli and cellular localization. DUSP1/MKP1 (MAP Kinase phosphatase 1) is primarily localized in the nucleus, and has broad substrate specificity towards p44/42 MAPK, p38 MAPK and SAPK/JNK (1-3). DUSP1's transcription and activity are tightly regulated. First, DUSP1 is transcriptionally induced through p44/42 MAPK, p53 and Jak2 (2,4,5). Second, DUSP1 is phosphorylated by p44/42 MAPK at Ser359 and Ser364 in its carboxy-terminal region, which inhibits DUSP1 degradation through the ubiquitin pathway (6).

### Background References

1. Sun, H. et al. (1993) *Cell* 75, 487-93.
2. Brondello, J.M. et al. (1997) *J Biol Chem* 272, 1368-76.
3. Franklin, C.C. and Kraft, A.S. (1997) *J Biol Chem* 272, 16917-23.
4. Li, M. et al. (2003) *J Biol Chem* 278, 41059-68.
5. Sandberg, E.M. et al. (2004) *J Biol Chem* 279, 1956-67.
6. Brondello, J.M. et al. (1999) *Science* 286, 2514-7.

### Species Reactivity

Species reactivity is determined by testing in at least one approved application (e.g., western blot).

### Western Blot Buffer

**IMPORTANT:** For western blots, incubate membrane with diluted primary antibody in 5% w/v BSA, 1X TBS, 0.1% Tween® 20 at 4°C with gentle shaking, overnight.

### Applications Key

**W:** Western Blotting **IP:** Immunoprecipitation

### Cross-Reactivity Key

**H:** Human

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