

12-4091: Phospho-MSK1 (Thr581) (Clone: A5) rabbit mAb

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| Clonality : | Monoclonal |
| Clone Name : | MSK1T581-A5 |
| Application : | FACS, WB |
| Reactivity : | Human |
| Conjugate : | Unconjugated |
| Format : | Purified |
| Alternative Name : | Ribosomal protein S6 kinase alpha-5, S6K-alpha-5, 90 kDa ribosomal protein S6 kinase 5, Nuclear mitogen- and stress-activated protein kinase 1, RSK-like protein kinase, RSKL, RPS6KA5 |
| Isotype : | Rabbit IgG1k |
| Immunogen Information : | A synthetic phospho-peptide corresponding to residues surrounding Thr581 of human phospho MSK1 |

Description

MSK1 (mitogen and stress activated protein kinase 1, phospho MSK1) is activated by Erk in response to growth factors and by p38 in response to cellular stress (1). MSK1 is similar to RSK1 in that it has two kinase domains and a connecting regulatory linker region (2). S364/S381 phosphorylation activates RSK1 (3), which is analogous to residues S360 and S376 of MSK1, which may be important for phospho MSK1 activity.

Product Info

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| Amount : | 200 µl |
| Content : | 1X PBS, 0.02% NaN ₃ , 50% Glycerol, 0.1% BSA |
| Storage condition : | Store at -20°C. Avoid repeated freeze and thaw cycles. |

Application Note

1µg/mL - 0.001µg/mL. It is recommended that the reagent be titrated for optimal performance for each application. See product image legends for additional information.(0.5mg/ml, more than 200 western blots)

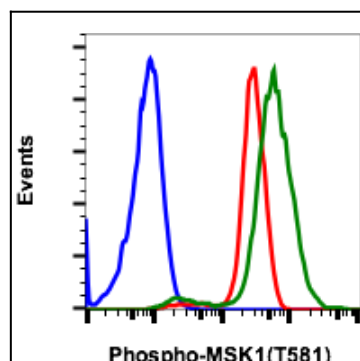


Fig-1: Flow cytometric analysis of U937 cells secondary antibody only negative control (blue) or untreated (red) or treated with CalA (green) using Phospho-MSK1(T581) antibody MSK1T581-A5 1.0 µg/mL.

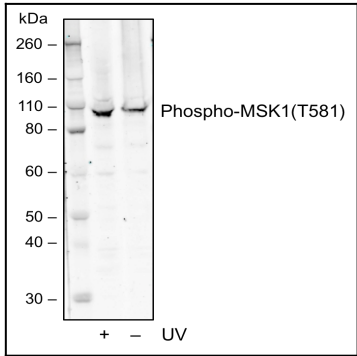


Fig 2 : Western blot analysis of 293T cell extract untreated or treated with UV using 0.1 µg/mL Phospho-MSK1 (Thr581) antibody MSK1T581-A5.

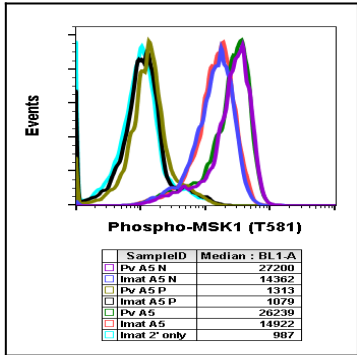


Fig-3: Peptide blocking flow cytometric analysis of K562 cells secondary antibody only negative control (light blue) or imatinib-treated (red) or pervanadate-treated (green) or imatinib and blocked with phospho-peptide (black) or pervanadate and blocked with phospho peptide (gold) or imatinib and blocked with non-phospho peptide (dark blue) or pervanadate and blocked with non-phospho peptide (purple) Phospho-MSK1 (Thr581) antibody MSK1T581-A5 at 0.1µg/mL.

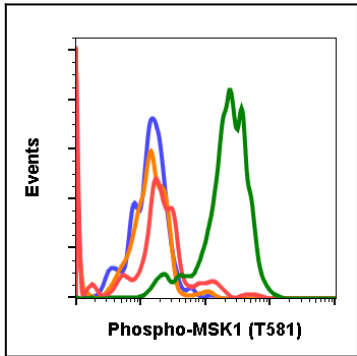


Fig-4: Flow cytometric analysis of C2C12 cells secondary antibody only negative control (blue) or 0.1 µg/mL of isotype control (orange) or treated with imatinib (red) or with pervanadate (green) using Phospho-MSK1 (Thr581) antibody MSK1T581-A5 at 0.1 µg/mL.

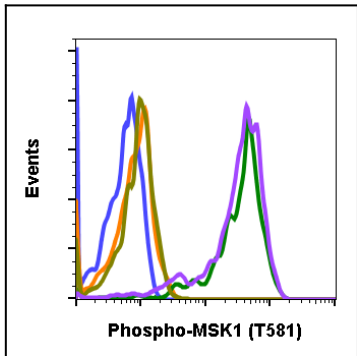


Fig-5: Peptide blocking flow cytometric analysis of C6 cells secondary antibody only negative control (light blue) or pervanadate-treated and stained using 0.1µg/mL isotype control (orange) or pervanadate-treated and stained using 0.1µg/mL Phospho-MSK1 (Thr581) antibody MSK1T581-A5 (green) or pervanadate and blocked with phospho peptide (gold) or pervanadate and blocked with non-phospho peptide (purple).

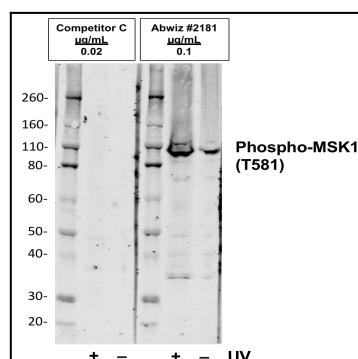


Fig-6: Western blot analysis of 293T cell extract untreated or treated with staurosporine using 0.1 µg/mL Phospho-MSK1 (Thr581) antibody MSK1T581-A5 or Company C antibody at 0.02 µg/mL (manufacturer's recommended concentration) developed using the same exposure.