# Human MSK1 Alexa Fluor® 532-conjugated Antibody

Monoclonal Rabbit IgG Clone # 1013F
Catalog Number: FAB25181X
100 µg

## DESCRIPTION

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| **Species Reactivity** | Human |
| **Specificity** | Detects human MSK1 and MSK2 when phosphorylated at S376 and S360, respectively. |
| **Source** | Monoclonal Rabbit IgG Clone # 1013F |
| **Purification** | Protein A or G purified from cell culture supernatant |
| **Immunogen** | Phosphopeptide containing the human MSK1(S376) site.<br>Accession # O75582 |
| **Conjugate** | Alexa Fluor 532<br>Excitation Wavelength: 534 nm<br>Emission Wavelength: 553 nm |
| **Formulation** | Supplied 0.2mg/ml in 1X PBS with RDF1 and 0.09% Sodium Azide<br><br>*Contains <0.1% Sodium Azide, which is not hazardous at this concentration according to GHS classifications. Refer to the Safety Data Sheet (SDS) for additional information and handling instructions. |

## APPLICATIONS

**Please Note:** *Optimal dilutions should be determined by each laboratory for each application. General Protocols are available in the Technical Information section on our website.*

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| **Immunocytochemistry** | Optimal dilution of this antibody should be experimentally determined. |

## PREPARATION AND STORAGE

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| **Shipping** | The product is shipped with polar packs. Upon receipt, store it immediately at the temperature recommended below. |
| **Stability & Storage** | Protect from light. Do not freeze. 12 months from date of receipt, 2 to 8 °C as supplied |

## BACKGROUND

Mitogen- and Stress-activated protein Kinases 1 and 2 (MSK1/2) have been shown to play key roles in the transcriptional regulation of immediate early genes such as c-fos. MSK1, also known as Ribosomal Protein S6 Kinase 5 (RPS6KA5), and MSK2, also known as RSKB and RPS6KA4, belong to the AGC family of kinases. Both proteins have two kinase domains connected by a regulatory linker region, and are activated by the mitogen-activated protein kinases ERK1, ERK2, and p38. Nuclear MSK phosphorylates and activates a number of transcription factors, including ATF1 and CREB. The phosphorylation of MSK1 at Ser376 or the equivalent Ser360 in MSK2 is required for kinase activity. These sites are located in the AGC kinase domain and are autophosphorylated. Their phosphorylation is essential for the catalytic activity of the N-terminal kinase domain. The sequence surrounding MSK1(S376) and MSK2(S360) is 100% identical.

## PRODUCT SPECIFIC NOTICES

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