

DESCRIPTION

Species Reactivity	Human
Specificity	Detects human MSK1 and MSK2 when phosphorylated at S376 and S360, respectively.
Source	Monoclonal Rabbit IgG Clone # 1013D
Purification	Protein A or G purified from cell culture supernatant
Immunogen	Phosphopeptide containing the human MSK1(S376) site. Accession # O75582
Conjugate	Alexa Fluor 700 Excitation Wavelength: 675-700 nm Emission Wavelength: 723 nm
Formulation	Supplied 0.2mg/ml in 1X PBS with RDF1 and 0.09% Sodium Azide *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.

Western Blot Optimal dilution of this antibody should be experimentally determined.

PREPARATION AND STORAGE

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

This product is provided under an agreement between Life Technologies Corporation and R&D Systems, Inc, and the manufacture, use, sale or import of this product is subject to one or more US patents and corresponding non-US equivalents, owned by Life Technologies Corporation and its affiliates. The purchase of this product conveys to the buyer the non-transferable right to use the purchased amount of the product and components of the product only in research conducted by the buyer (whether the buyer is an academic or for-profit entity). The sale of this product is expressly conditioned on the buyer not using the product or its components (1) in manufacturing; (2) to provide a service, information, or data to an unaffiliated third party for payment; (3) for therapeutic, diagnostic or prophylactic purposes; (4) to resell, sell, or otherwise transfer this product or its components to any third party, or for any other commercial purpose. Life Technologies Corporation will not assert a claim against the buyer of the infringement of the above patents based on the manufacture, use or sale of a commercial product developed in research by the buyer in which this product or its components was employed, provided that neither this product nor any of its components was used in the manufacture of such product. For information on purchasing a license to this product for purposes other than research, contact Life Technologies Corporation, Cell Analysis Business Unit, Business Development, 29851 Willow Creek Road, Eugene, OR 97402, Tel: (541) 465-8300. Fax: (541) 335-0354.