

DESCRIPTION

Species Reactivity	Human
Specificity	Detects human MSX2 in ELISAs. In direct ELISAs, no cross-reactivity with recombinant human MSX1 is observed.
Source	Monoclonal Mouse IgG ₁ Clone # 786607
Purification	Protein A or G purified from hybridoma culture supernatant
Immunogen	<i>E. coli</i> -derived recombinant human MSX2 Ala2-Thr132 Accession # P35548
Conjugate	Alexa Fluor 532 Excitation Wavelength: 534 nm Emission Wavelength: 553 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.

Immunocytochemistry 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

MSX2, also known as HOX-8, is an approximately 35 kDa homeobox transcription factor that is a downstream target of canonical Wnt signaling. MSX2 plays an important role in the development of mineralized tissues including bone, cartilage, and teeth. It is upregulated in atherosclerotic plaques and promotes the calcification of vascular smooth muscle cells during inflammation. MSX2 suppresses the adipocytic differentiation of multipotent mesenchymal cells. MSX2 acts in mammary gland development and the initiation of female fetal germ cell meiosis. It promotes tumorigenesis of breast and pancreatic carcinomas but inhibits the survival and invasiveness of melanoma cells. Human MSX2 contains one homeodomain (aa 143-201). Within aa 1-132, human MSX2 shares 87% aa sequence identity with mouse and rat MSX2.

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.