

DESCRIPTION

Species Reactivity	Human
Specificity	Detects human MyoD in direct ELISAs.
Source	Monoclonal Mouse IgG _{2A} Clone # 474515
Purification	Protein A or G purified from hybridoma culture supernatant
Immunogen	<i>E. coli</i> -derived recombinant human MyoD Glu77-Gly215 Accession # P15172
Formulation	Lyophilized from a 0.2 µm filtered solution in PBS with Trehalose. See Certificate of Analysis for details. *Small pack size (-SP) is supplied either lyophilized or as a 0.2 µm filtered solution in PBS.

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.

	Recommended Concentration	Sample
Immunocytochemistry	8-25 µg/mL	Immersion fixed C2C12 mouse myoblast cell line

PREPARATION AND STORAGE

Reconstitution	Reconstitute at 0.5 mg/mL in sterile PBS.
Shipping	The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature recommended below. *Small pack size (-SP) is shipped with polar packs. Upon receipt, store it immediately at -20 to -70 °C
Stability & Storage	Use a manual defrost freezer and avoid repeated freeze-thaw cycles. <ul style="list-style-type: none"> ● 12 months from date of receipt, -20 to -70 °C as supplied. ● 1 month, 2 to 8 °C under sterile conditions after reconstitution. ● 6 months, -20 to -70 °C under sterile conditions after reconstitution.

BACKGROUND

MyoD (myoblast determination protein 1), also called Myf-3 (myogenic factor 3) is an ~44 kDa nuclear protein in the MyoD family of muscle-specific bHLH transcription factors. MyoD family members heterodimerize with E proteins and cooperate with MEF2 family transcription factors to regulate expression of skeletal muscle-specific genes. MyoD is essential for skeletal muscle differentiation. Acetylation at lysines 99, 102 and 104 further regulates its activity. Human MyoD shares 96% amino acid identity with mouse and rat MyoD over the sequence used as the immunogen.