

DESCRIPTION

Species Reactivity	Human/Mouse
Specificity	Detects human MEF2C in direct ELISAs. In direct ELISAs, no cross-reactivity with recombinant human SRF is observed.
Source	Monoclonal Mouse IgG _{2B} Clone # 681824
Purification	Protein A or G purified from hybridoma culture supernatant
Immunogen	<i>E. coli</i> -derived recombinant human MEF2C Ala135-Lys239 Accession # Q06413
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.

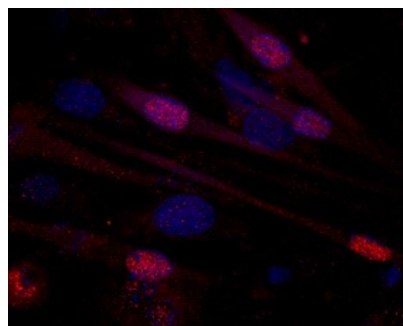
APPLICATIONS

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	See Below
Immunohistochemistry	5-25 µg/mL	See Below

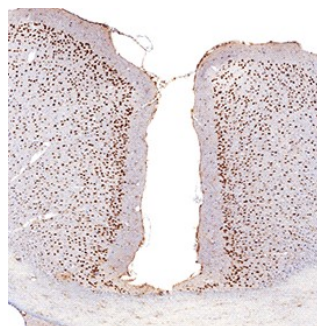
DATA

Immunocytochemistry



MEF2C in C2C12 Mouse Cell Line. MEF2C was detected in immersion fixed differentiated C2C12 mouse myoblast cell line using Mouse Anti-Human/Mouse MEF2C Monoclonal Antibody (Catalog # MAB6786) at 10 µg/mL for 3 hours at room temperature. Cells were stained using the NorthernLights™ 557-conjugated Anti-Mouse IgG Secondary Antibody (red; Catalog # NL007) and counter-stained with DAPI (blue). Specific staining was localized to nucleus of myoblasts. View our protocol for [Fluorescent ICC Staining of Cells on Coverslips](#).

Immunohistochemistry



MEF2C in Human Brain. MEF2C was detected in immersion fixed paraffin-embedded sections of human brain (cortex) using Mouse Anti-Human/Mouse MEF2C Monoclonal Antibody (Catalog # MAB6786) at 5 µg/mL for 1 hour at room temperature followed by incubation with the Anti-Mouse IgG VisUCyte™ HRP Polymer Antibody (Catalog # VC001). Tissue was stained using DAB (brown) and counterstained with hematoxylin (blue). Specific staining was localized to neuronal nuclei. View our protocol for [IHC Staining with VisUCyte HRP Polymer Detection Reagents](#).

PREPARATION AND STORAGE

Reconstitution	Sterile PBS to a final concentration of 0.5 mg/mL.
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

MEF2C (myocyte enhancer factor-2C) is a 51 kDa (predicted) protein that is one of four members of the MEF2/MADS (MCM1, Agamous, Deficiens, Serum response) box family of transcription factors. The 473 amino acid (aa) human MEF2C contains a MADS box for dimerization (aa 3-57), a DNA binding domain (aa 58-86), a beta domain (aa 271-278; missing in a 465 aa isoform), a transcriptional repressor (aa 368-399; missing in a 441 aa isoform) and several acetylation and ser/thr phosphorylation sites. Within aa 135-239, human MEF2C shares 95% and 98% aa identity with mouse and rat MEF2C, respectively. MEF2C plays important roles in preferential lymphoid differentiation of hematopoietic precursors, and in neuronal, cardiac and skeletal muscle morphogenesis.