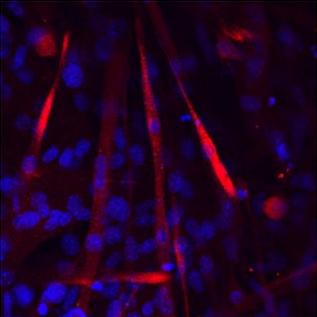


DESCRIPTION	
<b>Species Reactivity</b>	Mouse
<b>Specificity</b>	Detects mouse M-Cadherin/Cadherin-15 in direct ELISAs. In direct ELISAs, no cross-reactivity with recombinant human M-Cadherin, recombinant mouse (rm) Cadherin-13, or rmP-Cadherin is observed.
<b>Source</b>	Monoclonal Rat IgG <sub>2A</sub> Clone # 800516
<b>Purification</b>	Protein A or G purified from hybridoma culture supernatant
<b>Immunogen</b>	Mouse myeloma cell line NS0-derived recombinant mouse M-Cadherin/Cadherin-15 Val22-Ala605 Accession # P33146
<b>Formulation</b>	Lyophilized from a 0.2 µm filtered solution in PBS with Trehalose. See Certificate of Analysis for details. *Small pack size (-SP) is supplied as a 0.2 µm filtered solution in PBS.

APPLICATIONS	
<b>Please Note:</b> Optimal dilutions should be determined by each laboratory for each application. <i>General Protocols</i> are available in the <i>Technical Information</i> section on our website.	

	Recommended Concentration	Sample
<b>Immunocytochemistry</b>	8-25 µg/mL	See Below

## DATA

Immunocytochemistry	
	<p><b>M-Cadherin/Cadherin-15 in C2C12 Mouse Cell Line.</b> M-Cadherin/Cadherin-15 was detected in immersion fixed C2C12 mouse myoblast cells differentiated for 5 days with 5% equine serum using Rat Anti-Mouse M-Cadherin/Cadherin-15 Monoclonal Antibody (Catalog # MAB7677) at 10 µg/mL for 3 hours at room temperature. Cells were stained using the NorthernLights™ 557-conjugated Anti-Rat IgG Secondary Antibody (red; Catalog # NL013) and counterstained with DAPI (blue). Specific staining was localized to cytoplasm of developing myotubes. View our protocol for <a href="#">Fluorescent ICC Staining of Cells on Coverslips</a>.</p>

PREPARATION AND STORAGE	
<b>Reconstitution</b>	Sterile PBS to a final concentration of 0.5 mg/mL.
<b>Shipping</b>	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
<b>Stability &amp; Storage</b>	<b>Use a manual defrost freezer and avoid repeated freeze-thaw cycles.</b> <ul style="list-style-type: none"> <li>● 12 months from date of receipt, -20 to -70 °C as supplied.</li> <li>● 1 month, 2 to 8 °C under sterile conditions after reconstitution.</li> <li>● 6 months, -20 to -70 °C under sterile conditions after reconstitution.</li> </ul>

## BACKGROUND

CDH-15 (Cadherin 15; also M-cadherin, Muscle cadherin and Cadherin-14) is a 125-127 kDa atypical member of the classical cadherin family, cadherin superfamily of molecules. It is expressed by muscle satellite cells, cells of the embryonic myotome, and hematopoietic bone marrow stem cells. CDH-15 appears to bind homotypically in trans, thus allowing for the identification and subsequent fusion of myoblast precursors, particularly those in slow-twitch (or red fiber) muscles. This is accompanied by a downregulation of mitochondrial induced apoptosis. Mouse CDH-15 is synthesized as a 784 amino acid (aa) preproprecursor. It contains a 21 aa signal sequence, a 38 aa propeptide, and a 725 aa mature region. The mature region is expressed as a type I transmembrane glycoprotein that possesses a 546 aa extracellular region (aa 60-605) and a 159 aa cytoplasmic domain (aa 626-784). The extracellular region shows five consecutive cadherin domains. Over aa 22-605, mouse CDH-15 shares 88% and 97% aa sequence identity with human and rat CDH-15, respectively.