

## DESCRIPTION

|                           |   |
|---------------------------|---|
| <b>Species Reactivity</b> | Human/Mouse/Rat   |
| <b>Specificity</b>        | Detects human CUGBP1/CELF1 in direct ELISAs and Western blots.  |
| <b>Source</b>             | Monoclonal Mouse IgG <sub>2B</sub> Clone # 850717   |
| <b>Purification</b>       | Protein A or G purified from hybridoma culture supernatant  |
| <b>Immunogen</b>          | <i>E. coli</i> -derived recombinant human CUGBP1/CELF1<br>Met1-Gly60<br>Accession # Q92879  |
| <b>Formulation</b>        | Lyophilized from a 0.2 µm filtered solution in PBS with Trehalose. See Certificate of Analysis for details.<br>*Small pack size (-SP) is supplied either lyophilized or as a 0.2 µm filtered solution in PBS. |

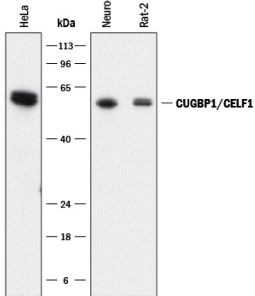
## APPLICATIONS

**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    |
|-----------------------------|---------------------------|-----------|
| <b>Western Blot</b>         | 0.5 µg/mL                 | See Below |
| <b>Immunohistochemistry</b> | 8-25 µg/mL                | See Below |

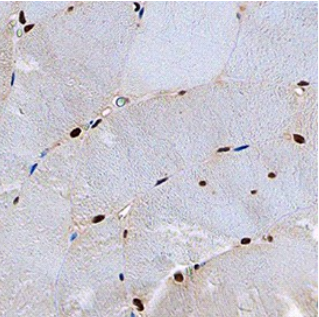
## DATA

**Western Blot**



**Detection of Human, Mouse, and Rat CUGBP1/CELF1 by Western Blot.**  
Western blot shows lysates of HeLa human cervical epithelial carcinoma cell line, Neuro-2A mouse neuroblastoma cell line, and Rat-2 rat embryonic fibroblast cell line. PVDF membrane was probed with 0.5 µg/mL of Mouse Anti-Human/Mouse/Rat CUGBP1/CELF1 Monoclonal Antibody (Catalog # MAB9388) followed by HRP-conjugated Anti-Mouse IgG Secondary Antibody (Catalog # HAF018). A specific band was detected for CUGBP1/CELF1 at approximately 50 kDa (as indicated). This experiment was conducted under reducing conditions and using Immunoblot Buffer Group 1.

**Immunohistochemistry**



**CUGBP1/CELF1 in Human Skeletal Muscle.** CUGBP1/CELF1 was detected in immersion fixed paraffin-embedded sections of human skeletal muscle using Mouse Anti-Human/Mouse/Rat CUGBP1/CELF1 Monoclonal Antibody (Catalog # MAB9388) at 15 µg/mL overnight at 4 °C. Tissue was stained using the Anti-Mouse HRP-DAB Cell & Tissue Staining Kit (brown; Catalog # CTS002) and counterstained with hematoxylin (blue). Specific staining was localized to nuclei. View our protocol for [Chromogenic IHC Staining of Paraffin-embedded Tissue Sections](#).

## PREPARATION AND STORAGE

|                                |  |
|--------------------------------|--|
| <b>Reconstitution</b>          | Reconstitute at 0.5 mg/mL in sterile PBS.  |
| <b>Shipping</b>                | The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature recommended below.<br>*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

CELF-1 is a highly conserved, ubiquitous protein which binds pre-mRNA in the nucleus to mediate alternative splicing to produce alternative transcripts in tissue-specific and developmentally regulated events. In the cytoplasm, CELF-1 binds to GRE-containing transcripts which are rapidly degraded. Additionally, cytoplasmic CELF-1 binds to untranslated regions of transcripts for stability and translation efficiency. Many transcripts targeted by CELF-1 show rapid up-regulation leading to cellular activation or proliferation, while others show down-regulation. CELF-1 has also been shown to localize to cytoplasmic stress granules when cells are stressed. This gene is associated with myotonic dystrophy type 1 (DM1) disease though interactions with the dystrophin myotonic-protein kinase (DMPK) gene.