

## 36-2838: Anti-Myogenin / Myf-4 (Skeletal Muscle Marker) Monoclonal Antibody(Clone: MYOG/2660)

|                                |   |
|--------------------------------|---|
| <b>Clonality :</b>             | Monoclonal  |
| <b>Clone Name :</b>            | MYOG/2660   |
| <b>Application :</b>           | IHC   |
| <b>Reactivity :</b>            | Human   |
| <b>Gene :</b>                  | MYOG  |
| <b>Gene ID :</b>               | 4656  |
| <b>Uniprot ID :</b>            | P15173  |
| <b>Alternative Name :</b>      | bHLHc3, cb553, Class C basic helix-loop-helix protein 3, Myf-4, MYF4, MYOG, Myogenic factor 4 |
| <b>Isotype :</b>               | Mouse IgG1, kappa   |
| <b>Immunogen Information :</b> | Recombinant full-length human myogenin (MYOG) protein   |

### Description

Myogenin is a member of the MyoD family of myogenic basic helix-loop-helix (bHLH) transcription factors that also includes MyoD, Myf-5, and MRF4 (also known as herculinor Myf-6). MyoD family members are expressed exclusively in skeletal muscle and play a key role in activating myogenesis by binding to enhancer sequences of muscle-specific genes. The regulatory domain of MyoD is approximately 70 amino acids in length and includes both a basic DNA binding motif and a bHLH dimerization motif. MyoD family members share about 80% amino acid homology in their bHLH motifs. Anti-myogenin labels the nuclei of myoblasts in developing muscle tissue, and is expressed in tumor cell nuclei of rhabdomyosarcoma and some leiomyosarcomas. Positive nuclear staining may occur in Wilms' tumor.

### Product Info

|                            |   |
|----------------------------|---|
| <b>Amount :</b>            | 20 µg / 100 µg  |
| <b>Content :</b>           | 200 µg/ml of Ab Purified from Bioreactor Concentrate by Protein A/G. Prepared in 10mM PBS with 0.05% BSA & 0.05% azide. Also available WITHOUT BSA & azide at 1.0mg/ml. |
| <b>Storage condition :</b> | Antibody with azide - store at 2 to 8°C. Antibody without azide - store at -20 to -80°C. Antibody is stable for 24 months. Non-hazardous.                               |

### Application Note

Immunohistochemistry (Formalin-fixed) (1-2ug/ml for 30 minutes at RT)(Staining of formalin-fixed tissues requires heating tissue sections in 10mM Tris with 1mM EDTA, pH 9.0, for 45 min at 95°C followed by cooling at RT for 20 minutes);

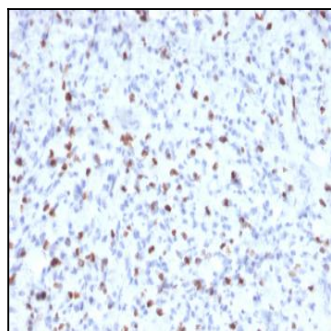


Fig. 1: Formalin-fixed, paraffin-embedded human Rhabdomyosarcoma stained with Myogenin Mouse Monoclonal Antibody (MYOG/2660)

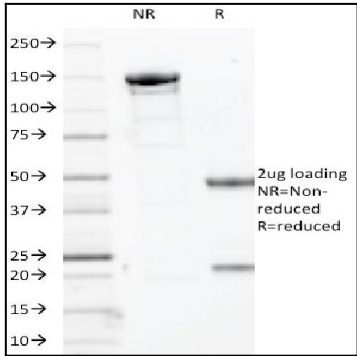


Fig. 2: SDS-PAGE Analysis Purified Myogenin Mouse Monoclonal Antibody (MYOG/2660). Confirmation of Integrity and Purity of Antibody.

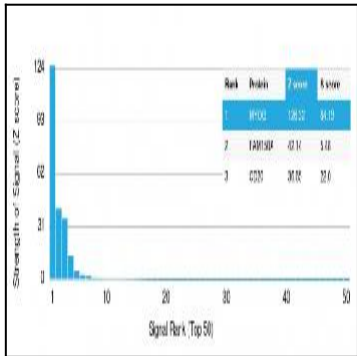


Fig. 3: Analysis of Protein Array containing more than 19,000 full-length human proteins using Myogenin Mouse Monoclonal Antibody (MYOG/2660). Z- and S- Score: The Z-score represents the strength of a signal that a monoclonal antibody (Monoclonal Antibody) (in combination with a fluorescently-tagged anti-IgG secondary antibody) produces when binding to a particular protein on the HuProt™ array. Z-scores are described in units of standard deviations (SD's) above the mean value of all signals generated on that array. If targets on HuProt™ are arranged in descending order of the Z-score, the S-score is the difference (also in units of SD's) between the Z-score. S-score therefore represents the relative target specificity of a Monoclonal Antibody to its intended target. A Monoclonal Antibody is considered to specific to its intended target, if the Monoclonal Antibody has an S-score of at least 2.5. For example, if a Monoclonal Antibody binds to protein X with a Z-score of 43 and to protein Y with a Z-score of 14, then the S-score for the binding of that Monoclonal Antibody to protein X is equal to 29.