# Aeonian Biotech
## Your choice for selective antibodies

**Cat nr   AE00194**

Mouse Monoclonal Antibody, clone MYOG/2660 to:

# Myogenin, MYOG

Class C basic helix-loop-helix protein 3; Myogenic factor 4; MYF4; bHLHc3; myo

| | |
|---|---|
| Cellular localization | Nucleus |
| | |
| Official Symbol (Gene) | MYOG |
| GeneID | 4656 |
| SwissProt | P15173 |
| | |
| Confirmed Applications | IHC, PA |
| Positive controls | rhabdomyosarcoma |
| | |
| Aeonian Rating© | 80 |
| | |
| Purification | By Protein G from bioreactor concentrate |
| Formulation | 200ug IgG/ml in PBS, 0.05% BSA, 0.05% azide (20ug or 100ug) |
| | 1mg IgG/ml in PBS (100ug or contact us for quotation) |
| Amount | ☐ 20ug ☐ 100ug |
| Isotype | Mouse IgG1, kappa |
| Confirmed species reactivity | Human |
| Immunogen | Recombinant full length human Myogenin protein |
| | |
| Epitope | Unknown |

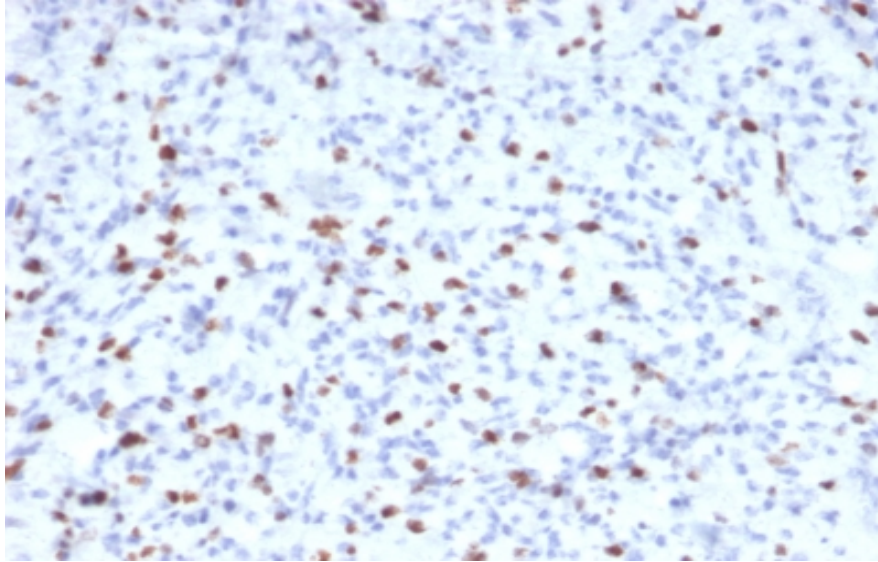| | |
|---|---|
| Storage instructions | Avoid repeated freeze/thaw cycles. For long term storage, keep small aliquots at -20C or -80C and keep one aliquot at 4C for daily experimentations. Azide will preserve antibody at 4C for 6-12 months, when kept away from direct sun light. |
| Expiration | Integrity warranted for 24 months after purchase when handled and stored according to instructions, see below. |
| Warranty | This product is only warranted for the specifications as described in this product sheet and only when the product is handled and stored according to instructions. User should validate this antibody in the application and tissue/cell type as required, after confirmation of integrity upon receipt is obtained by reproducing the performance as described below. Should such confirmation not be attempted, any warranty is void. In case of non-conformance, user needs to contact us immediately for replacement or refund. |
| Liability | This product is for in vitro research use only. Any other applications, such as diagnostics or therapeutics, or in vivo experiments, and the validation of this product therein, are solely at the responsibility of the buyer/user. |

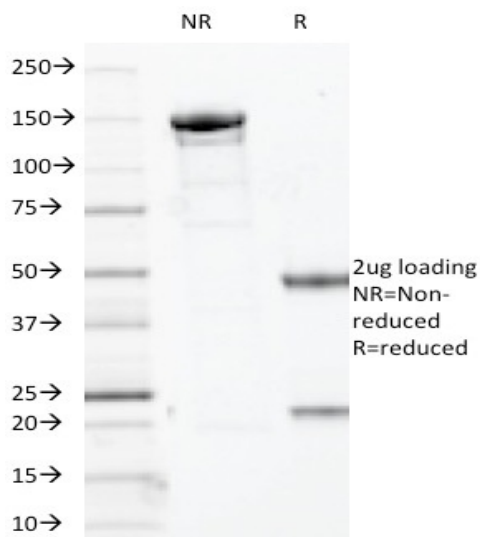| | |
|---|---|
| Product performance | see next pages |

**Product data:**

ImmunoHistoChemistry (IHC):
This product shows select nuclear staining in human rhabdomyosarcoma sections. Recommended concentration: 1-3ug/ml
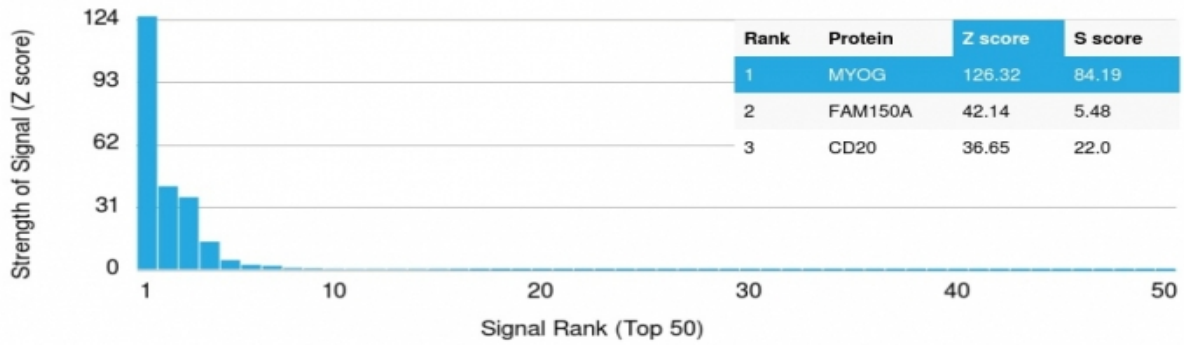


Formaldehyde-fixed, paraffin-embedded human rhabdomyosarcoma stained with Myogenin Mouse Monoclonal Antibody AE00194 at 1-2ug/ml for 30 minutes at RT. Epitope retrieval: Boiling at pH6 for 10-20 min followed by 20 min cooling. DAB staining by HRP polymer.

SDS-PAGE Analysis of Purified Myogenin Mouse Monoclonal Antibody AE00194. Confirmation of Purity and Integrity of Antibody.



Integrity of the purified antibody AE00194 under non-reduced and reduced conditions, showing intact IgG at around 150kDa (NR) and intact heavy and light chains at 48kDa and 23kDa resp. (R).

Specificity and selectivity of AE00194 to Myogenin were tested against >19,000 full-length human proteins on a human protein array. A protein BLAST search against H. sapiens revealed the following closely related proteins: MYF3 (MYOD1), MYF5 and MYF6. The proteins MYF3 and MYF5 were part of the array used and showed no cross-reactivity signals.



| Rank | Protein | Z score | S score |
|------|---------|---------|---------|
| 1 | MYOG | 126.32 | 84.19 |
| 2 | FAM150A | 42.14 | 5.48 |
| 3 | CD20 | 36.65 | 22.0 |

Cross-reactivity assessment of Myogenin Mouse Monoclonal Antibody AE00194 (1ug/ml) on CDI's Protein Array containing more than 19,000 full-length human proteins.

The Z-score represents the strength of a signal that an antibody (through a fluorophore-tagged secondary reagent) produces when binding to a particular protein on the array. Z-scores are in units of standard deviations (SD's) above the mean value of all signals generated on that array. When Z-scores are arranged in descending order, the difference between two successive values will be the S-score for the first. Thus, the S-score represents the relative specificity of the antibody to its intended target.  An antibody is considered specific to its intended target, when it has an S-score of at least 2.5. For example, if an antibody binds to intended protein X with a Z-score of 43 and to the cross-reacting protein Y with a next Z-score of 14, then the S-score for the antibody to intended target X equals 29 (43-14).