# Aeonian Biotech 

## Your choice for selective antibodies

## Cat nr AE00271

Mouse Monoclonal Antibody, clone HRB2/451 to:

## HER2, ERBB2

Erb-b2 receptor tyrosine kinase 2; Receptor tyrosine-protein kinase erbB-2; Metastatic lymph node gene 19 protein; Proto-oncogene c-ErbB-2; Proto-oncogene Neu; Tyrosine kinase-type cell surface receptor HER2; CD340; HER-2; HER-2/neu; HER2; MLN 19; MLN19; NEU; NGL; TKR1; p185erbB2

| Cellular localization | Plasma membrane, cell surface |
| :---: | :---: |
| Official Symbol (Gene) | ERBB2 |
| Geneld | 2064 |
| SwissProt | P04626 |
| Confirmed Applications | ICC, PA |
| Positive controls | HER2-type breast cancer, MCF7 |
| Aeonian Rating( | 80 |
| Purification | By Protein G from bioreactor concentrate |
| Formulation | $200 \mathrm{ug} \mathrm{lgG} / \mathrm{ml}$ in PBS, $0.05 \%$ BSA, $0.05 \%$ azide (20ug or 100ug) |
| $\square$ | $1 \mathrm{mg} \mathrm{IgG} / \mathrm{ml}$ in PBS (100ug or contact us for quotation) |
| Amount | $\square$ 20ug $\quad \square \quad 100 \mathrm{ug}$ |
| Isotype | Mouse IgG1, kappa |
| Confirmed species reactivity | Human |
| Immunogen | Recombinant full length HER2 protein |
| Epitope | Unknown |


| Storage instructions | Avoid repeated freeze/thaw cycles. For long term storage, keep small aliquots at -20C <br> or -80C and keep one aliquot at 4C for daily experimentations. Azide will preserve <br> 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 <br> according to instructions, see below. |
| 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. |  |
| 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 data:

ImmunoCytoChemistry (ICC):
This product shows plasma membrane staining in cell line MCF7. Recommended concentration: 2-
4ug/ml


Confocal microscopy of cell line MCF7 stained with HER2 Mouse Monoclonal Antibody AE00271 at 3ug/ml ( 1 h at ambient temp). CF488 (green) staining of the antibody and RedDot (red) for nuclear staining.

SDS-PAGE Analysis of Purified HER2 Mouse Monoclonal Antibody AE00271. Confirmation of Purity and Integrity of Antibody.


Integrity of the purified antibody AE00271 under non-reduced and reduced conditions, showing intact $\lg G$ at around 150 kDa (NR) and intact heavy and light chains at 50kDa and 25 kDa resp. (R).

Specificity and selectivity of AE00271 to HER2 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: EGFR, HER3 and HER4. These proteins were part of the array used and showed no cross-reactivity signals.


Cross-reactivity assessment of HER2 Mouse Monoclonal Antibody AE00271 (1ug/ml) on CDI's Protein Array containing more than 19,000 fulllength 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).

