



Cat nr AE00172

Product Datasheet

Recombinant Mouse Antibody, clone rESR1/1935 to:

ESR1, Estrogen receptor 1

Estrogen receptor-1; Estrogen receptor alpha; Estrogen receptor-alpha; Eralpha; ER-alpha; Estradiol receptor; Nuclear receptor subfamily 3 group A member 1; ER; ESR; ESRA; ESTRR; Era; NR3A1

Cellular localization Nucleus

Official Symbol (Gene) ESR1

GenelD 2099

SwissProt P03372

Confirmed Applications IHC, PA, WB
Positive controls MCF7, ER-type breast cancers

Aeonian Rating© 90

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
Confirmed species reactivity Human
Immunogen Recombinant full-length human ESR1 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.

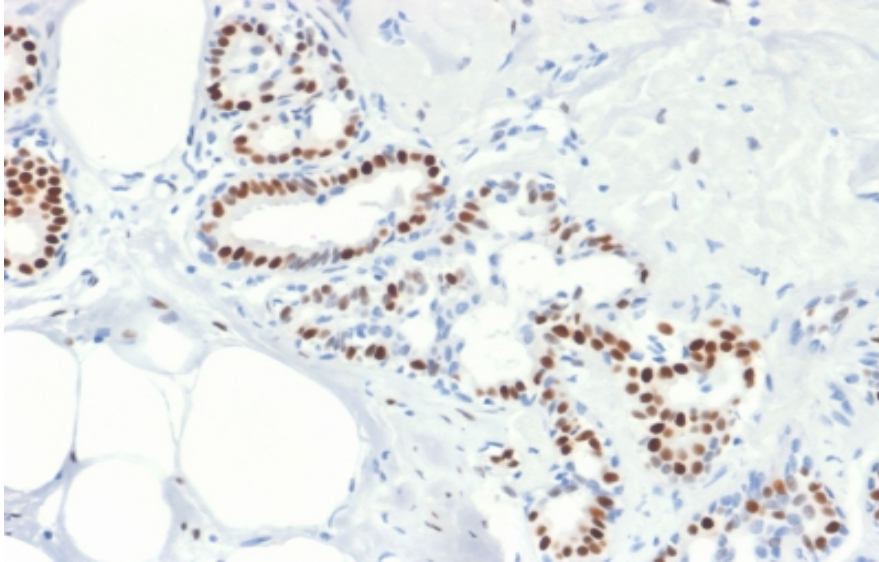
Liability This product is for in vitro research use only. Any other applications, such as diagnostics or therapeutics, or in vivo experiments, and the validation of this product therein, are solely at the responsibility of the buyer/user.

Product performance see next pages

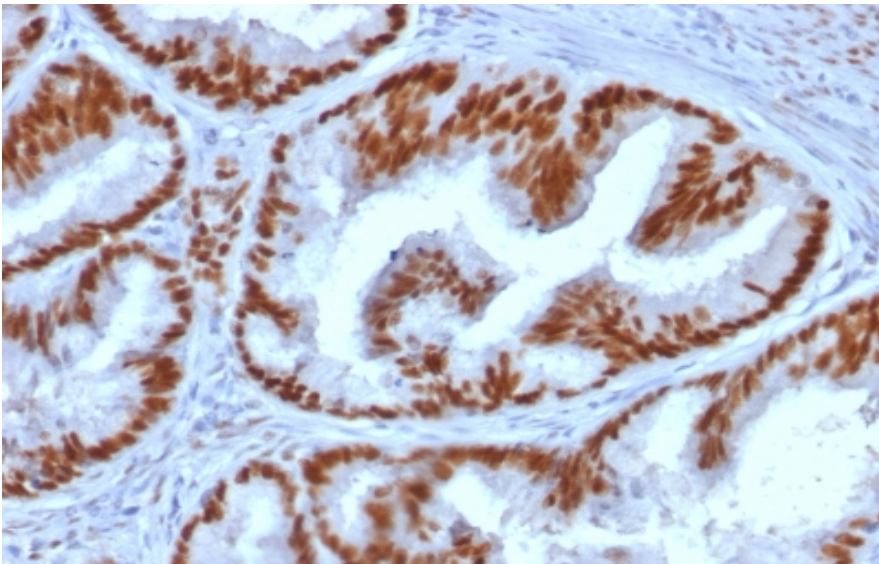
Product data:

ImmunoHistoChemistry (IHC):

This product was successfully used to stain nuclei in epithelial cells of human breast carcinoma and endometrial carcinoma sections. Recommended concentration: 1-3ug/ml



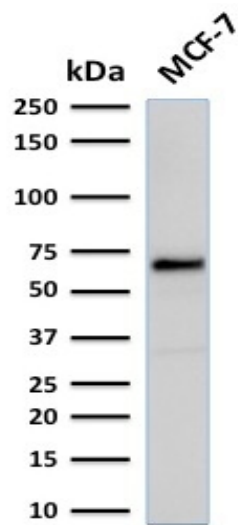
Formaldehyde-fixed, paraffin-embedded human breast carcinoma stained with ESR1 Mouse Recombinant Antibody AE00172 at 1-2ug/ml for 30 minutes at RT. Epitope retrieval: Boiling at pH6 for 10-20 min followed by 20 min cooling. DAB staining by HRP polymer.



Formaldehyde-fixed, paraffin-embedded human endometrial carcinoma stained with ESR1 Mouse Recombinant Antibody AE00172 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. Data obtained from non-recombinant version of this clone (ESR1/1935).

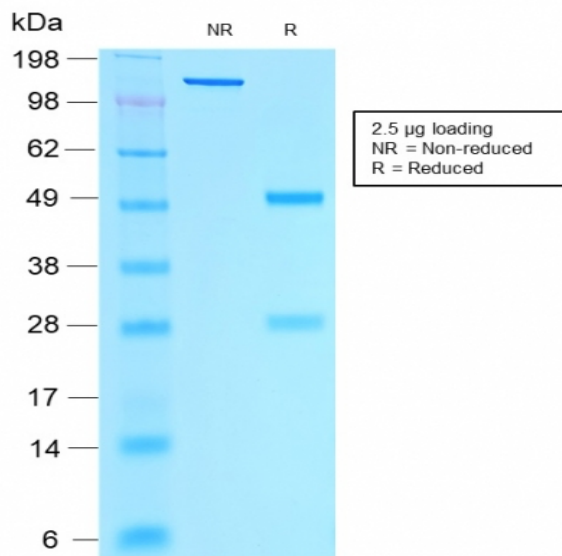
Western Blot (WB):

This product was successfully used to stain an approx. 70kDa band in lysates of cell line MCF7.
Recommended concentration: 1-3ug/ml



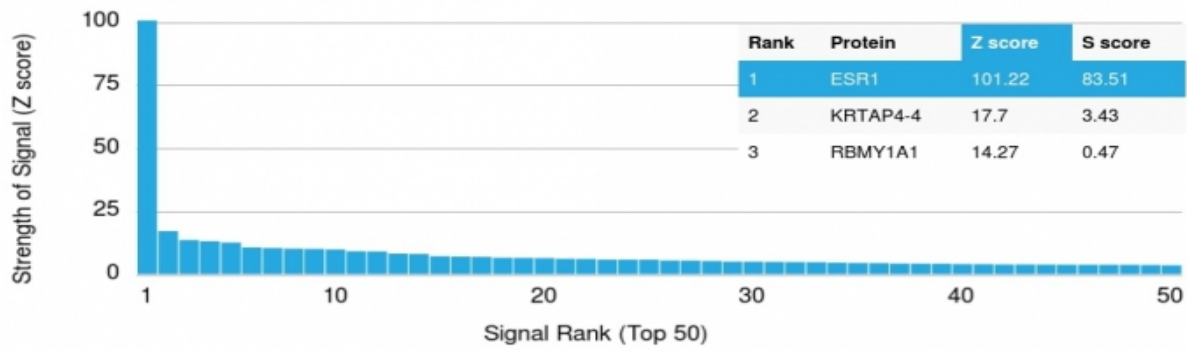
Western Blot of MCF7 lysate (30ug) stained with ESR1 Mouse Recombinant Antibody AE00172 at 1ug/ml (1h at ambient temp). ECL staining by HRP.

SDS-PAGE Analysis of Purified ESR1 Mouse Recombinant Antibody AE00172. Confirmation of Purity and Integrity of Antibody.



Integrity of the purified antibody AE00172 under non-reduced and reduced conditions, showing intact IgG at around 150kDa (NR) and intact heavy and light chains at 50kDa and 28kDa resp. (R).

Specificity and selectivity of AE00172 to ESR1 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 protein: ESR2 and ERR3. These proteins were part of the array used and showed no cross-reactivity signals.



Cross-reactivity assessment of ESR1 Mouse Recombinant Antibody AE00172 (1ug/ml) on CDI's Protein Array containing more than 19,000 full-length human proteins. Data obtained from non-recombinant version of this clone (ESR1/1935).

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).