



**Cat nr AE00256**

**Product Datasheet**

Recombinant Mouse Antibody, clone rNX2/294 to:

## **NKX2-2, NK2 homeobox 2**

Homeobox protein Nkx-2.2; Homeobox protein NK-2 homolog B; NKX2B; NKX2-2; NKX2.2

Cellular localization                      Nucleus

Official Symbol (Gene)                      NKX2-2

GenelD    4821

SwissProt    O95096

Confirmed Applications                      IHC, PA  
Positive controls                              Ewing's sarcoma

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, kappa  
Confirmed species reactivity                      Human  
Immunogen    Recombinant full length human NKX2-2 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.

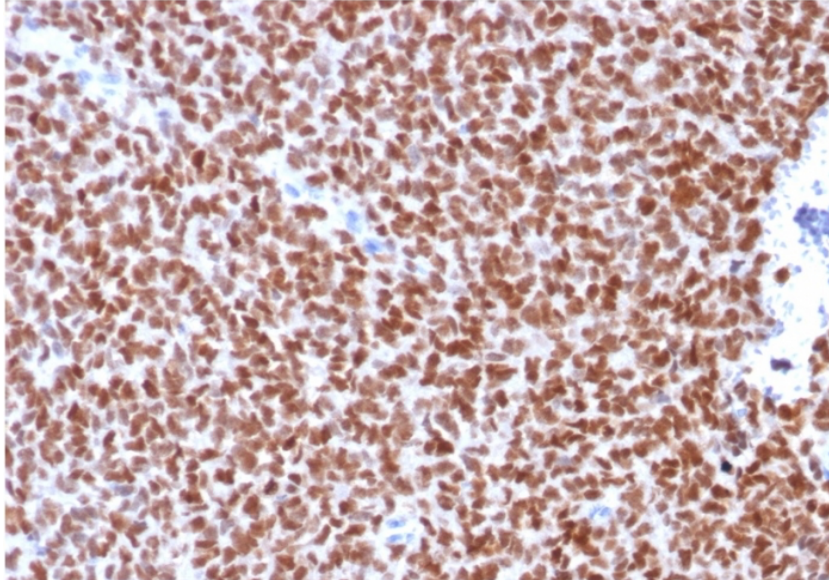
Liability    This product is for in vitro research use only. Any other applications, such as diagnostics or therapeutics, or in vivo experiments, and the validation of this product therein, are solely at the responsibility of the buyer/user.

Product performance                              see next pages

### Product data:

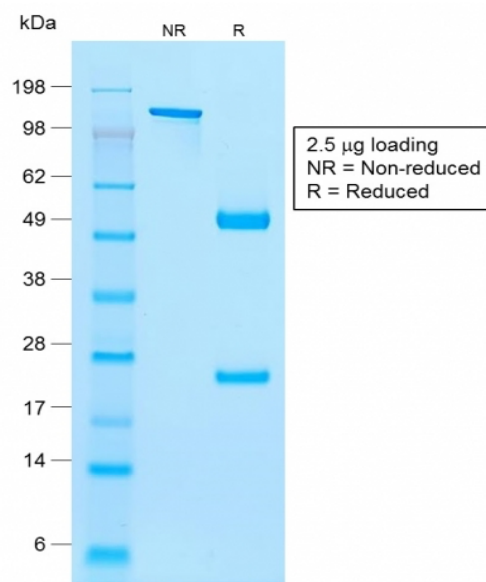
#### ImmunoHistoChemistry (IHC):

This product was successfully used to stain nuclei in human Ewing's sarcoma sections. Recommended concentration: 1-3ug/ml



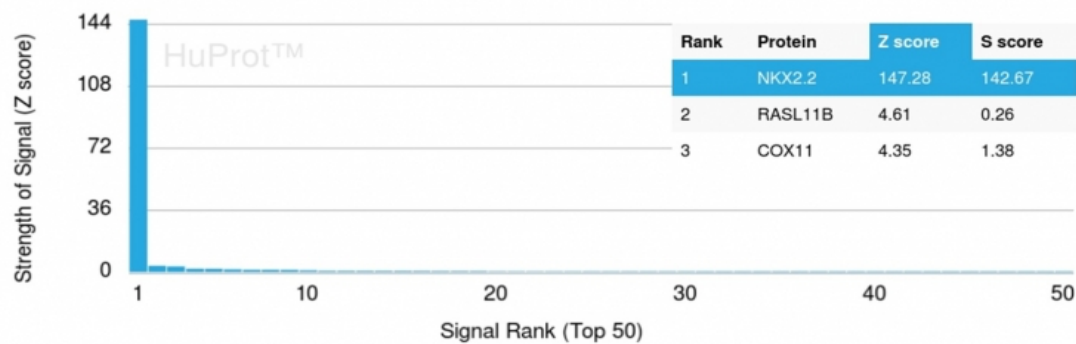
Formaldehyde-fixed, paraffin-embedded human Ewing's sarcoma stained with NKX2-2 Mouse Recombinant Antibody AE00256 at 1-2ug/ml for 30 minutes at RT. Epitope retrieval: boiling at pH6 for 10-20 min followed by 20 min cooling. DAB staining by HRP polymer.

#### SDS-PAGE Analysis of Purified NKX2-2 Mouse Recombinant Antibody AE00256. Confirmation of Purity and Integrity of Antibody.



Integrity of the purified antibody AE00256 under non-reduced and reduced conditions, showing intact IgG at around 150kDa (NR) and intact heavy and light chains at 50kDa and 22kDa resp. (R).

Specificity and selectivity of AE00256 to NKX2-2 were tested against >19,000 full-length human proteins on a human protein array. A protein BLAST search against H. sapiens revealed other members of the NKX2 family and NKX3 family members. These proteins were part of the array and showed no cross-reactivity



Cross-reactivity assessment of NKX2-2 Mouse Recombinant Antibody AE00256 (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).