

## 36-2852: Anti-NKX2.2 (Neuroendocrine & Ewing's Sarcoma Marker) Monoclonal Antibody(Clone: rNX2/294)

| Clonality :  | Monoclonal   |
|--|--|
| Clone Name :   | rNX2/294   |
| Application :  | IHC  |
| Reactivity :   | Human  |
| Gene :   | NKX2-2   |
| Gene ID :  | 4821   |
| Uniprot ID :   | O95096   |
| Alternative Name :   | Homeobox protein NK-2 homolog B, NK2 transcription factor like protein B, NK2 transcription factor related locus 2, NKX22, Nkx2b, tinman |
| Isotype :  | Mouse IgG1, kappa  |
| Immunogen Information : Recombinant full-length human NKX2.2 protein |  |

## Description

Expression of NKX2.2 has been found in neuroendocrine tumors of the gut, making it a potential marker for the study of gastrointestinal neuroendocrine tumors. More recently, NKX2.2 protein was identified as a target of EWS-FLI-1, the fusion protein specific to Ewing sarcoma, and was shown to be differentially upregulated in Ewing sarcoma on the basis of array-based gene expression analysis. It acts as a valuable marker for Ewing sarcoma, with a sensitivity of 93% and a specificity of 89%, and aids in the differential diagnosis of small round cell tumors.

| Product Info        |   |
|---------------------|---|
| Amount :            | 20 μg / 100 μg  |
| Content :           | 200 μg/ml of recombinant MAb Purified by Protein A/G. Prepared in 10mM PBS with 0.05% BSA<br>& 0.05% azide. Also available WITHOUT BSA & azide at 1.0mg/ml. |
| Storage condition : | 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);

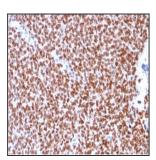


Fig. 1: Formalin-fixed, paraffin-embedded human Ewing's Sarcoma stained with NKX2.2-Monospecific Recombinant Mouse Monoclonal Antibody (rNX2/294).

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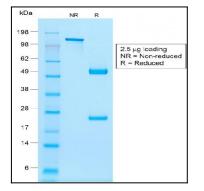


Fig. 2: SDS-PAGE Analysis Purified NKX2.2-Monospecific Recombinant Mouse Monoclonal Antibody (rNX2/294). Confirmation of Purity and Integrity of Antibody.

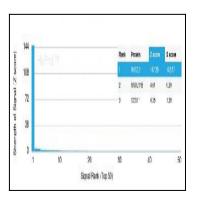


Fig. 3: Analysis of Protein Array containing more than 19,000 full-length human proteins using NKX2.2-Monospecific Recombinant Mouse Monoclonal Antibody (rNX2/294) Z- and S- Score: The Z-score represents the strength of a signal that a monoclonal antibody (Monoclonal Antibody) (in combination with a fluorescently-tagged anti-IgG secondary antibody) produces when binding to a particular protein on the HuProtTM 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 HuProtTM 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.