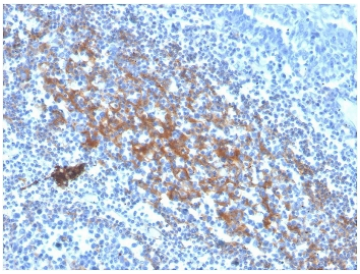
# CD73 Antibody [clone NT5E/2646] (V7588BTN)

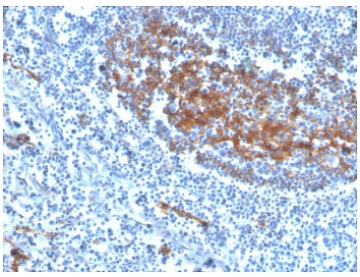
| Catalog No. | Formulation | Size |
|---|---|---|
| V7588BTN | 0.1 mg/ml with 0.1 mg/ml BSA (US sourced), 0.05% sodium azide | 500 ul |

**Bulk quote request**

| | |
|---|---|
| **Availability** | 1-3 business days |
| **Species Reactivity** | Human |
| **Format** | Biotin Conjugate |
| **Clonality** | Monoclonal (mouse origin) |
| **Isotype** | Mouse IgG1, kappa |
| **Clone Name** | NT5E/2646 |
| **Purity** | Protein G affinity chromatography |
| **UniProt** | P21589 |
| **Localization** | Cell surface |
| **Applications** | ELISA : order Ab without BSA for coating<br>Flow Cytometry : 2-4ug/million cells in 0.1ml<br>Immunofluorescence : 2-4ug/ml<br>Western Blot : 2-4ug/ml<br>Immunohistochemistry (FFPE) : 2-4ug/ml for 30 minutes at RT |
| **Limitations** | This CD73 antibody is available for research use only. |



IHC staining of FFPE human tonsil tissue with biotinylated CD73 antibody (clone NT5E/2646). HIER: boil tissue sections in pH9 10mM Tris with 1mM EDTA for 10-20 min and allow to cool before testing.



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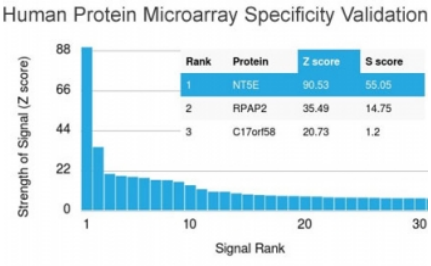
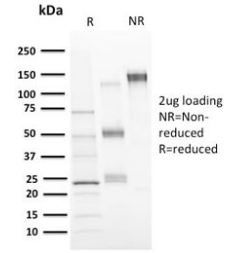
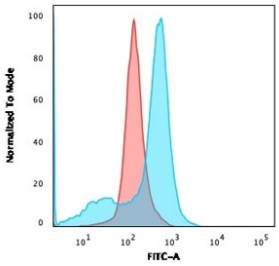


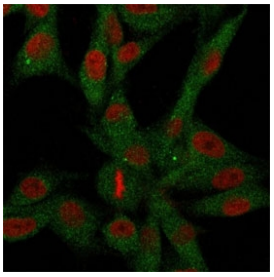

Analysis of HuProt(TM) microarray containing more than 19,000 full-length human proteins using CD73 antibody (clone NT5E/2646). These results demonstrate the foremost specificity of the NT5E/2646 mAb. Z- and S- score: The Z-score represents the strength of a signal that an antibody (in combination with a fluorescently-tagged anti-IgG secondary Ab) produces when binding to a particular protein on the HuProt(TM) array. Z-scores are described in units of standard deviations (SD's) above the mean value of all signals generated on that array. If the targets on the HuProt(TM) are arranged in descending order of the Z-score, the S-score is the difference (also in units of SD's) between the Z-scores. The S-score therefore represents the relative target specificity of an Ab to its intended target.




SDS-PAGE analysis of purified, BSA-free CD73 antibody (clone NT5E/2646) as confirmation of integrity and purity.




Flow cytometry testing of human U-87 MG cells with unlabeled CD73 antibody (clone NT5E/2646); Red=isotype control, Blue= CD73 antibody.



Immunofluorescence staining of human U-87 MG cells with unlabeled CD73 antibody (green, clone NT5E/2646) and Reddot nuclear stain (red).

## Description

CD73 is a membrane-bound extracellular enzyme overexpressed in several cancer types. Its expression has been linked to poor prognosis in melanoma, colorectal, gastric, triple negative breast cancer, and to a pro-metastatic phenotype in prostate cancer. Together with CD39, it plays a major role in promoting immunosuppression through the pathway degrading adenosine triphosphate (ATP) into adenosine. Within the tumor microenvironment, ATP promotes immune cell-mediated killing of cancer cells. In contrast, adenosine accumulation causes immune suppression, dysregulation of immune cell infiltrates and stimulates angiogenesis resulting in tumor spreading. CD73 is active on the last step of the

degradation pathway, where it is the enzyme that actually degrades AMP into adenosine. CD73-blockade promotes anti-tumor immunity by reducing adenosine accumulation. Accordingly, anti-CD73 mAbs stimulate anti-tumor immunity and reduce tumor metastasis in mouse tumor models, and could enhance the efficacy of treatment with anti-PD1 or anti-CTLA4 antibodies.

## Application Notes

Optimal dilution of the CD73 antibody should be determined by the researcher.

## Immunogen

Recombinant full-length human NT5E protein was used as the immunogen for the CD73 antibody.

## Storage

Store the CD73 antibody at 2-8oC (up to one month) or aliquot and store at -20oC (longer term).