

CD73 (Immuno-Oncology Target) Antibody

Mouse Monoclonal Antibody [Clone NT5E/2646]

Catalog No	Format	Size
4907-MSM6-B1	Purified Ab conjugated to Biotin	0.5 ml at 100ug/ml

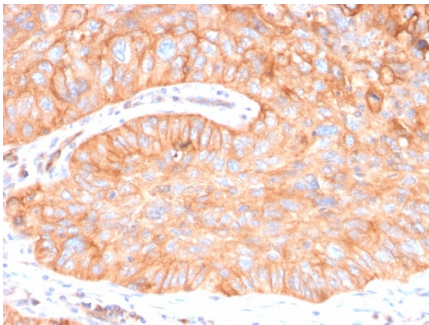
Applications	Tested Dillution	Note
Flow Cytometry (Flow)	1-2ug/million cells	
Immunofluorescence (IF)	1-3ug/ml	
Immunohistochemistry (IHC)	1-2ug/ml	30 min at RT. Staining of formalin-fixed tissues requires heating tissue sections in 10mM Tris with 1mM EDTA, pH 9.0, for 45 min at 95°C followed by cooling at RT for 20 minutes
Western Blot (WB)	2-4ug/ml	

Product Details

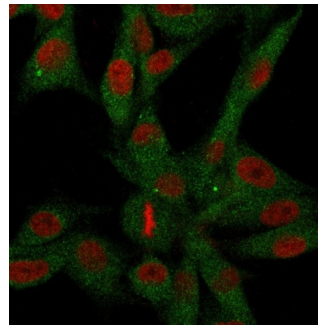
Clone	NT5E/2646
Gene Name	NT5E
Immunogen	Recombinant full-length human NT5E protein
Host	Mouse
Clonality	Monoclonal
Isotype / Light Chain	IgG1
Mol. Weight of Antigen	71kDa
Cellular Localization	Cell membrane, Cell surface
Species Reactivity	Human
Positive Control	A431

**Optimal dilution for a specific application should be determined.*

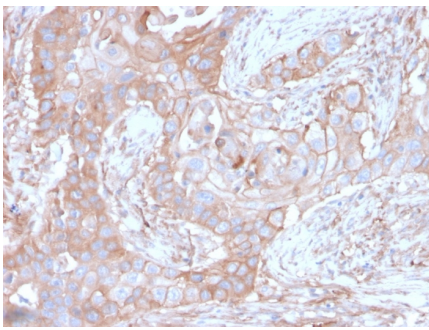
Product Images for CD73 (Immuno-Oncology Target) Antibody



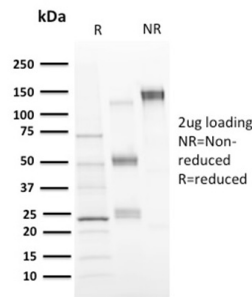
Formalin-fixed, paraffin-embedded human Colon Carcinoma stained with CD73 Mouse Monoclonal Antibody (NT5E/2646).



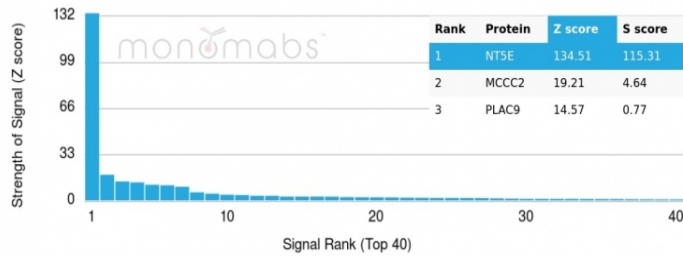
Immunofluorescence staining of U87MG cells using CD73 Mouse Monoclonal Antibody (NT5E/2646) followed by goat anti-mouse IgG-CF488 (green). Membrane stained with phalloidin (red).



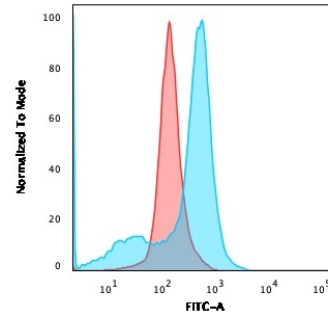
Formalin-fixed, paraffin-embedded human Colon Carcinoma stained with CD73 Mouse Monoclonal Antibody (NT5E/2646).



SDS-PAGE Analysis Purified CD73 Mouse Monoclonal Antibody (NT5E/2646). Confirmation of Integrity and Purity of Antibody.



Analysis of Protein Array containing more than 19,000 full-length human proteins using CD73-Monospecific Mouse Monoclonal Antibody (CD73/2646). Z- and S- Score: The Z-score represents the strength of a signal that a monoclonal antibody (MAb) (in combination with a fluorescently-tagged anti-IgG secondary antibody) produces when binding to a particular protein on the HuProt™ 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 HuProt™ 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 MAb to its intended target. A MAb is considered to specific to its intended target, if the MAb has an S-score of at least 2.5. For example, if a MAb 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 MAb to protein X is equal to 29.



Flow Cytometric Analysis of U87MG cells using CD73 Mouse Monoclonal Antibody (NT5E/2646) followed by goat anti-mouse IgG-CF488 (blue); isotype control (red).

Specificity & Comments

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.

Limitations and Warranty

This antibody is available for research use only and is not approved for use in diagnosis. There are no warranties, expressed or implied, which extend beyond this description. Company is not liable for any personal injury or economic loss resulting from this product.

Supplied As

Antibody purified from Bioreactor Concentrate by Protein A/G and conjugated to Biotin. Prepared in 10mM PBS with 0.05% BSA and 0.05% azide.

Storage and Stability

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. No MSDS required.

Research Areas

B Cell Markers, Immune checkpoint, Infectious Disease, Neuroscience