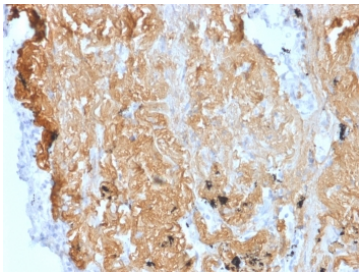
ZNF488 Antibody / Transcription Factor Marker [clone PCRP-ZNF488-2D8] (V4097)

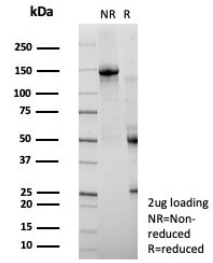
Catalog No.	Formulation	Size
V4097-100UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced), 0.05% sodium azide	100 ug
V4097-20UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced), 0.05% sodium azide	20 ug
V4097SAF-100UG	1 mg/ml in 1X PBS; BSA free, sodium azide free	100 ug

Bulk quote request

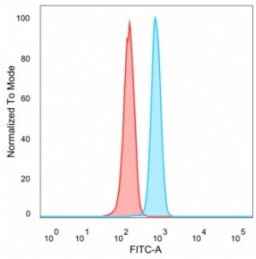
Availability	1-3 business days
Species Reactivity	Human
Format	Purified
Host	Mouse
Clonality	Monoclonal (mouse origin)
Isotype	Mouse IgG2a
Clone Name	PCRP-ZNF488-2D8
Purity	Protein A/G affinity
UniProt	Q96MN9
Localization	Nucleus
Applications	Flow Cytometry : 1-2ug/million cells Immunohistochemistry (FFPE) : 1-2ug/ml for 30 minutes at RT
Limitations	This ZNF488 antibody is available for research use only.



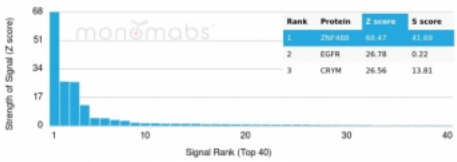
ZNF488 Antibody Uterus IHC. Immunohistochemistry analysis of FFPE human uterus tissue using ZNF488 antibody. The mouse monoclonal antibody clone PCRP-ZNF488-2D8 shows nuclear staining in epithelial cells, consistent with Zinc finger protein 488 / ZNF488 localization as a transcription factor marker. Signal is observed within cell nuclei of glandular and stromal compartments, reflecting transcriptional regulatory activity, while background staining remains low. HIER: boil tissue sections in 10 mM Tris with 1 mM EDTA, pH 9, for 20 min followed by cooling prior to staining.



SDS-PAGE analysis of purified, BSA-free ZNF488 antibody (clone PCRP-ZNF488-2D8) as confirmation of integrity and purity.



ZNF488 Antibody HeLa FACS. Flow cytometry analysis of PFA-fixed human HeLa cells using ZNF488 antibody. The mouse monoclonal antibody clone PCRP-ZNF488-2D8, detected with goat anti-mouse IgG-CF488 (blue), shows a clear right-shifted population compared to unstained cells (red), indicating positive intracellular staining of Zinc finger protein 488 / ZNF488. This shift supports detection of this nuclear transcription factor following permeabilization, consistent with its role as a transcription factor marker in proliferative epithelial cells.



ZNF488 Antibody Microarray Specificity Validation. Analysis of a HuProt(TM) microarray containing more than 19,000 full-length human proteins using ZNF488 Mouse Monoclonal (PCRP-ZNF488-2D8). Z- and S- Score: The Z-score represents the strength of a signal that a monoclonal antibody (in combination with a fluorescently-tagged anti-IgG secondary antibody) 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 targets on 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-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.

Description

Zinc finger protein 488 (ZNF488) is a nuclear transcription factor that belongs to the C2H2-type zinc finger protein family, a large group of DNA-binding proteins involved in regulating gene expression. ZNF488 antibody is commonly used to study this proteinÃ¢Â€Â™s role in transcriptional control, cellular differentiation, and lineage-specific gene regulation. As a zinc finger transcription factor, ZNF488 is thought to influence the expression of genes involved in developmental and cellular identity processes.

ZNF488 antibody, also known as Zinc finger protein 488 antibody or ZNF488 transcription factor antibody in the literature, enables detection of this nuclear protein in pathways associated with gene regulation and chromatin interaction. Members of the C2H2 zinc finger family typically function by binding specific DNA sequences and recruiting transcriptional co-regulators, thereby modulating gene expression patterns in a context-dependent manner. ZNF488 shares these structural and functional features, positioning it as a regulator of transcriptional programs in specialized cell types.

Functionally, ZNF488 has been implicated in cellular differentiation processes, particularly within epithelial and neural lineages. Its activity contributes to the establishment and maintenance of gene expression programs that define cell identity and functional specialization. Dysregulation of zinc finger transcription factors, including ZNF488, has been associated with altered gene expression profiles and disease states such as cancer. ZNF488 antibody provides a useful tool for investigating these regulatory mechanisms in both normal and pathological contexts.

Subcellularly, ZNF488 is localized to the nucleus, consistent with its role as a DNA-binding transcription factor. In tissue-based analysis, this is reflected by nuclear staining in cells expressing the protein, while in cell-based assays such as flow

cytometry, intracellular staining following permeabilization allows detection of nuclear transcription factors. ZNF488 antibody is therefore well suited for applications requiring identification of nuclear proteins and transcriptional regulators.

Expression of ZNF488 has been observed in epithelial tissues, including reproductive tract tissues such as the uterus, where it may contribute to tissue-specific gene regulation. Its presence in cultured cell lines such as HeLa further supports its role in maintaining transcriptional programs in proliferative cells. ZNF488 antibody enables analysis of these expression patterns across both tissue and cell-based systems.

This ZNF488 antibody is supported by protein microarray specificity validation, confirming selective binding to ZNF488 among a large panel of human proteins. In addition, immunohistochemistry and flow cytometry data support detection of ZNF488 in tissue sections and cultured cells, respectively. Together, these validation approaches provide confidence in specificity and performance, making this antibody a valuable reagent for studies of transcriptional regulation, nuclear protein expression, and cellular differentiation.

This antibody is part of a broader antibody panel offered by NSJ Bioreagents.

Application Notes

Optimal dilution of the ZNF488 antibody should be determined by the researcher.

Immunogen

A recombinant partial protein (within amino acids 170-307) from the human protein was used as the immunogen for the ZNF488 antibody.

Storage

Aliquot the ZNF488 antibody and store frozen at -20oC or colder. Avoid repeated freeze-thaw cycles.

Alternate Names

ZNF488 antibody, Zinc finger protein 488 antibody, ZNF488 transcription factor antibody, C2H2 zinc finger protein 488 antibody, ZNF488 protein antibody