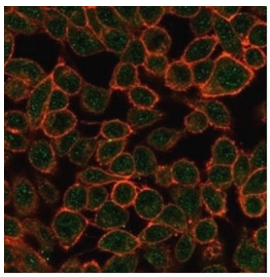
TDRKH Antibody / Microarray Specificity Validated Antibody [clone PCRP-TDRKH-1H2] (V9602)

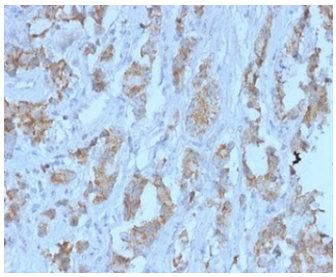
Catalog No.	Formulation	Size
V9602-100UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced), 0.05% sodium azide	100 ug
V9602-20UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced), 0.05% sodium azide	20 ug
V9602SAF-100UG	1 mg/ml in 1X PBS; BSA free, sodium azide free	100 ug

Bulk quote request

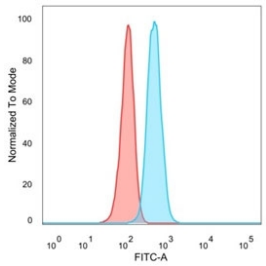
Availability	1-3 business days
Species Reactivity	Human
Format	Purified
Host	Mouse
Clonality	Monoclonal (mouse origin)
Isotype	Mouse IgG2b
Clone Name	PCRP-TDRKH-1H2
Purity	Protein A/G affinity
UniProt	Q9Y2W6
Localization	Cytoplasm
Applications	Flow Cytometry : 1-2ug/million cells Immunofluorescence : 1-2ug/ml Western Blot : 1-2ug/ml Immunohistochemistry (FFPE) : 1-2ug/ml
Limitations	This TDRKH Antibody / Microarray Specificity Validated Antibody is available for research use only.



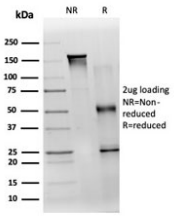
TDRKH Antibody HeLa IF. Immunofluorescent analysis of TDRKH expression in PFA-fixed human HeLa cells using TDRKH Antibody clone PCRP-TDRKH-1H2 (green) and phalloidin (red). The TDRKH Antibody shows punctate cytoplasmic staining with prominent perinuclear enrichment, consistent with cytoplasmic organelle-associated localization.



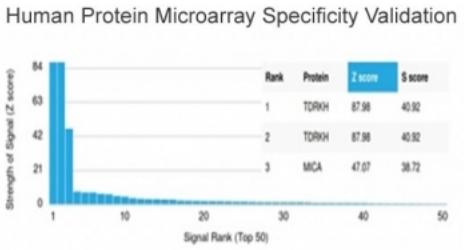
TDRKH Antibody Ovarian Carcinoma IHC. Immunohistochemistry analysis of Tudor and KH domain containing protein / TDRKH expression in FFPE human ovarian carcinoma tissue using TDRKH Antibody clone PCRP-TDRKH-1H2 at 2 ug/ml. The TDRKH Antibody shows cytoplasmic HRP-DAB brown staining in tumor cells with variable intensity, while surrounding stromal regions display reduced signal; nuclei are counterstained blue. Antigen retrieval was performed by boiling tissue sections in 10 mM Tris buffer with 1 mM EDTA, pH 9, for 20 min followed by cooling at room temperature.



TDRKH Antibody HeLa FACS. Flow cytometry analysis of Tudor and KH domain containing protein / TDRKH expression in PFA-fixed human HeLa cells using TDRKH Antibody clone PCRP-TDRKH-1H2 (blue) compared to unstained cells (red). The TDRKH Antibody demonstrates a clear right-shifted population relative to control, supporting detection of TDRKH-positive cells. This Microarray Specificity Validated Antibody supports highly specific detection of TDRKH in cell-based assays.



SDS-PAGE analysis of purified, BSA-free TDRKH antibody (clone PCRP-TDRKH-1H2) as confirmation of integrity and purity.



TDRKH Antibody Microarray Specificity Validation. Analysis of a protein microarray containing more than 19,000 full-length human proteins using TDRKH Antibody. The TDRKH Antibody shows top-ranked signal intensity for TDRKH with strong Z-score and S-score separation from other proteins, supporting highly specific target recognition and minimal cross-reactivity.

Description

Tudor and KH domain containing protein (TDRKH) is a cytoplasmic RNA-binding protein that plays a central role in piRNA pathway regulation and maintenance of genomic stability. TDRKH Antibody / Microarray Specificity Validated Antibody, clone PCRP-TDRKH-1H2, is a mouse monoclonal antibody developed for high-confidence detection of TDRKH, supported by protein microarray data demonstrating selective target recognition across a large panel of human proteins. TDRKH is predominantly localized in the cytoplasm with characteristic perinuclear enrichment, where it participates in RNA-processing complexes involved in small RNA biogenesis and post-transcriptional regulation. This antibody is part of a collection of Human Protein Microarray validated antibodies that have been screened for specificity across thousands of proteins.

TDRKH antibody, also referred to as Tudor and KH domain containing protein antibody or Tudor domain containing protein 2 antibody, recognizes a protein containing Tudor domains that mediate protein-protein interactions and KH domains that facilitate RNA binding. TDRKH functions in coordination with PIWI proteins and other components of the piRNA machinery, contributing to transposon silencing and preservation of genomic integrity, particularly in germline cells. Although highly expressed in reproductive tissues, TDRKH is also detectable in cultured cell systems, where it exhibits punctate cytoplasmic distribution consistent with RNA-associated granules and organelle-linked complexes.

This Microarray Specificity Validated Antibody is supported by protein microarray analysis demonstrating that the

strongest binding signals correspond to TDRKH, with high Z-score values and clear separation from non-target proteins. The appearance of top-ranked signals for TDRKH reflects consistent recognition across replicate or isoform representations on the array and supports highly specific target binding. This level of validation is particularly important for RNA-binding proteins, which often share conserved domains that can increase the risk of off-target interactions, and therefore provides strong confidence in antibody selectivity in complex biological samples.

Microarray-based specificity validation provides a comprehensive and high-resolution assessment of antibody performance by evaluating binding across more than 19,000 full-length human proteins in a single experiment. This independent validation complements application-based data by confirming that observed staining patterns and detection signals are attributable to the intended target. In the case of TDRKH, this ensures that punctate cytoplasmic localization observed in immunofluorescence and tissue-based assays reflects true biological distribution rather than non-specific binding artifacts.

Complementary application data supports detection of TDRKH across multiple experimental formats. Immunofluorescence analysis demonstrates punctate cytoplasmic staining with prominent perinuclear enrichment in cultured cells, consistent with its association with RNA-processing complexes. Immunohistochemistry further confirms expression in tissue contexts, while flow cytometry enables detection at the cellular population level. Together, these data provide a multi-dimensional characterization of TDRKH expression while maintaining strong confidence in specificity supported by microarray validation.

TDRKH plays an important role in regulating RNA-protein interactions and maintaining genomic stability through control of small RNA pathways. Disruption of TDRKH function has been associated with defects in germ cell development and RNA processing, highlighting its biological importance. Given its role in RNA biology and the importance of accurate target detection, clone PCRP-TDRKH-1H2 represents a highly specific reagent for TDRKH analysis. A TDRKH antibody can be used to evaluate expression and localization in systems where specificity and confidence in target recognition are essential for reliable experimental outcomes.

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

Application Notes

Optimal dilution of the TDRKH Antibody / Microarray Specificity Validated Antibody should be determined by the researcher.

Immunogen

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

Storage

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

Alternate Names

TDRKH antibody, Tudor and KH domain containing protein antibody, Tudor domain containing protein 2 antibody, TDRKH microarray validated antibody, TDRKH protein antibody