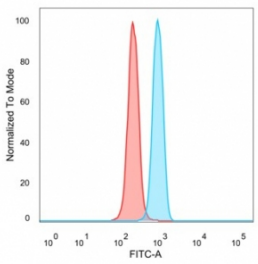
POGZ Antibody / Chromatin Regulation Marker [clone PCRP-POGZ-1B2] (V4095)

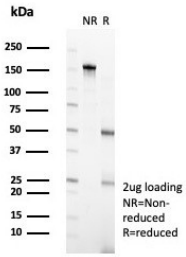
Catalog No.	Formulation	Size
V4095-100UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced), 0.05% sodium azide	100 ug
V4095-20UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced), 0.05% sodium azide	20 ug
V4095SAF-100UG	1 mg/ml in 1X PBS; BSA free, sodium azide free	100 ug

Bulk quote request

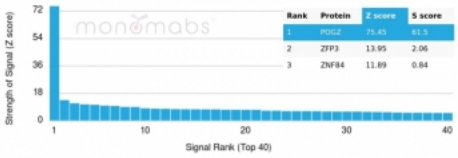
Availability	1-3 business days
Species Reactivity	Human
Format	Purified
Host	Mouse
Clonality	Monoclonal (mouse origin)
Isotype	Mouse IgG2b
Clone Name	PCRP-POGZ-1B2
Purity	Protein A/G affinity
UniProt	Q7Z3K3
Localization	Nucleus
Applications	Flow cytometry: 1-2ug/million cells
Limitations	This POGZ Antibody / Chromatin Regulation Marker is available for research use only.



POGZ Antibody HeLa FACS. Flow cytometry analysis of PFA-fixed human HeLa cells stained with POGZ Antibody / Chromatin Regulation Marker (blue, clone PCRP-POGZ-1B2) followed by goat anti-mouse IgG-CF488. Unstained cells are shown in red. The distinct fluorescence shift supports detection of endogenous Pogo transposable element-derived protein with zinc finger domain / POGZ expression in HeLa cells, consistent with the broad intracellular distribution expected for a chromatin-associated nuclear regulatory protein involved in developmental gene expression and transcriptional control pathways.



SDS-PAGE analysis of purified, BSA-free POGZ antibody (clone PCRP-POGZ-1B2) as confirmation of integrity and purity.



POGZ Antibody HuProt Microarray Specificity Validation. Analysis of a HuProt(TM) microarray containing more than 19,000 full-length human proteins using POGZ Antibody / Chromatin Regulation Marker clone PCRP-POGZ-1B2 demonstrates highly selective recognition of Pogo transposable element-derived protein with zinc finger domain / POGZ. The intended POGZ target ranks first among all proteins analyzed on the array, with strong separation from secondary signals, supporting the specificity profile of this mouse monoclonal antibody for chromatin regulation and nuclear signaling research applications. Z-score represents signal intensity above background in standard deviation units, while S-score reflects the relative specificity of antibody binding compared with additional proteins present on the HuProt(TM) platform.

Description

Pogo transposable element-derived protein with zinc finger domain (POGZ) is a chromatin-associated regulatory protein involved in transcriptional control, chromatin organization, and developmental gene expression pathways. POGZ Antibody / Chromatin Regulation Marker is suitable for investigations involving nuclear regulatory proteins, neurodevelopment-associated signaling pathways, and chromatin-associated transcriptional control mechanisms. POGZ contains multiple zinc finger domains and protein interaction motifs that contribute to regulation of chromatin structure and coordinated gene expression programs.

POGZ antibody, also referred to as Pogo transposable element-derived protein with zinc finger domain antibody, Zinc finger chromatin regulator antibody, and HP1-binding protein antibody in the literature, recognizes a nuclear-associated regulatory protein implicated in chromatin remodeling and transcription-associated signaling pathways. POGZ has been reported to interact with heterochromatin-associated proteins including HP1 family members and is linked to regulation of mitotic chromosome organization, transcriptional modulation, and developmental gene expression networks. The protein is primarily localized within the nucleus, consistent with its role in chromatin-associated regulatory processes.

Chromatin regulatory proteins such as POGZ participate in pathways controlling cellular differentiation, developmental signaling, proliferation, and maintenance of transcriptional homeostasis. POGZ has attracted significant interest in neurodevelopmental biology because altered expression or mutation of the gene has been associated with autism spectrum disorders, intellectual disability syndromes, and developmental abnormalities involving transcriptional and chromatin-associated regulatory pathways. Through modulation of chromatin accessibility and gene expression programs, POGZ contributes to coordinated developmental and differentiation-associated signaling networks.

Zinc finger regulatory proteins frequently function within multiprotein nuclear complexes that integrate chromatin organization with transcriptional regulation. POGZ has additionally been linked to pathways involved in mitotic progression, chromosome segregation, and maintenance of genomic regulatory architecture. Because chromatin-associated transcriptional regulators coordinate broad developmental and signaling-associated programs, POGZ remains relevant for studies examining nuclear gene expression control, developmental signaling pathways, and chromatin-associated disease mechanisms.

Flow cytometry analysis supports detection of endogenous POGZ expression in human cells. HuProt(TM) protein microarray specificity validation with clone PCRP-POGZ-1B2 further demonstrates highly selective recognition of POGZ among more than 19,000 full-length human proteins. The combined validation profile supports use of this mouse

monoclonal antibody for investigations involving chromatin regulation, transcription-associated signaling pathways, developmental gene expression programs, and zinc finger nuclear regulatory proteins.

An antibody targeting POGZ can therefore support studies involving chromatin-associated transcriptional regulation, developmental signaling pathways, neurodevelopmental biology, nuclear regulatory complexes, and zinc finger protein-mediated gene expression control.

POGZ functions in chromatin-associated transcriptional regulation and developmental signaling pathways; explore related nuclear regulatory proteins and cellular pathway targets on our Cell Biology Antibodies landing page.

Application Notes

Optimal dilution of the POGZ Antibody / Chromatin Regulation Marker should be determined by the researcher.

Immunogen

Recombinant full-length human Pogo transposable element with ZNF domain protein was used as the immunogen for the POGZ antibody.

Storage

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

Alternate Names

POGZ antibody, Pogo transposable element-derived protein with zinc finger domain antibody, Zinc finger chromatin regulator antibody, HP1-binding protein antibody, Neurodevelopmental regulatory protein antibody

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