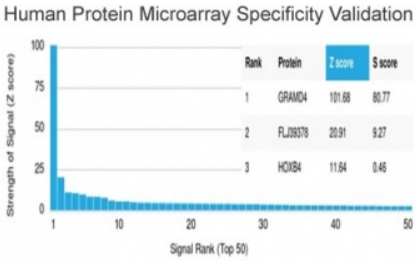
GRAMD4 Antibody / Apoptosis Regulation Marker [clone PCRP-GRAMD4-1A10] (V9499)

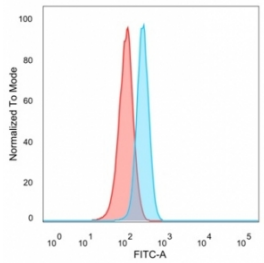
Catalog No.	Formulation	Size
V9499-100UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced), 0.05% sodium azide	100 ug
V9499-20UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced), 0.05% sodium azide	20 ug
V9499SAF-100UG	1 mg/ml in 1X PBS; BSA free, sodium azide free	100 ug

Bulk quote request

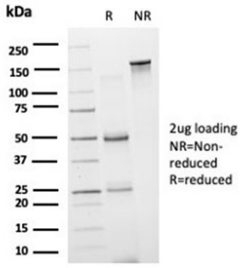
Availability	1-3 business days
Species Reactivity	Human
Format	Purified
Host	Mouse
Clonality	Monoclonal (mouse origin)
Isotype	Mouse IgG1
Clone Name	PCRP-GRAMD4-1A10
Purity	Protein A/G affinity
UniProt	Q6IC98
Localization	Cytoplasm
Applications	Flow cytometry: 1-2ug/million cells Immunofluorescence: 1-2ug/ml
Limitations	This GRAMD4 Antibody / Apoptosis Regulation Marker is available for research use only.



GRAMD4 Antibody HuProt Microarray Specificity Validation. Analysis of a HuProt(TM) microarray containing more than 19,000 full-length human proteins using GRAMD4 Antibody / Apoptosis Regulation Marker clone PCRP-GRAMD4-1A10 demonstrates highly selective recognition of GRAM domain-containing protein 4 / GRAMD4. The intended GRAMD4 target ranks first among all proteins analyzed on the array, with exceptionally strong separation from secondary signals, supporting the specificity profile of this mouse monoclonal antibody for apoptosis signaling and mitochondrial regulatory pathway 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.



GRAMD4 Antibody HeLa FACS. Flow cytometry analysis of PFA-fixed human HeLa cells stained with GRAMD4 Antibody / Apoptosis Regulation Marker (blue, clone PCRP-GRAMD4-1A10). Isotype control cells are shown in red. The distinct fluorescence shift supports detection of endogenous GRAM domain-containing protein 4 / GRAMD4 expression in human HeLa cells, consistent with the intracellular distribution expected for a mitochondrial-associated regulatory protein involved in apoptosis signaling and stress-response pathways.



SDS-PAGE analysis of purified, BSA-free GRAMD4 antibody (clone PCRP-GRAMD4-1A10) as confirmation of integrity and purity.

Description

GRAM domain-containing protein 4 (GRAMD4) is a regulatory protein involved in apoptosis-associated signaling pathways, mitochondrial membrane regulation, and p53-mediated cellular stress responses. GRAMD4 Antibody / Apoptosis Regulation Marker is suitable for investigations involving mitochondrial signaling pathways, programmed cell death mechanisms, and stress-associated transcriptional regulation. GRAMD4 has been implicated in pathways controlling apoptotic signaling and cellular responses to genotoxic stress and differentiation-associated signaling environments.

GRAMD4 antibody, also referred to as GRAM domain-containing protein 4 antibody, Death-inducing p53 target protein 1 antibody, DIP1 antibody, and Mitochondrial apoptosis protein antibody in the literature, recognizes a regulatory protein associated with mitochondrial apoptotic signaling pathways. GRAMD4 expression has been linked to p53-responsive transcriptional programs and apoptosis-associated cellular signaling mechanisms. Through regulation of mitochondrial-associated pathways, GRAMD4 contributes to programmed cell death signaling and stress-associated cellular homeostasis networks.

Proteins involved in apoptosis regulation and mitochondrial signaling are central components of pathways controlling proliferation, survival, differentiation, and cellular stress adaptation. GRAMD4 has been investigated in studies involving tumor suppression pathways, p53-associated transcriptional responses, and mitochondrial apoptotic regulation. Because mitochondrial signaling proteins participate in broader cellular stress-response mechanisms, GRAMD4 remains relevant for investigations involving cancer biology, apoptosis-associated transcriptional regulation, and cellular response pathways linked to DNA damage and stress signaling.

GRAMD4 additionally contains a GRAM domain associated with membrane-interacting signaling proteins involved in intracellular regulatory pathways. Members of the GRAM domain-containing protein family have been implicated in membrane-associated signaling events, organelle regulation, and stress-responsive cellular pathways. Through interactions with mitochondrial and apoptosis-associated signaling networks, GRAMD4 contributes to regulation of cell fate-associated transcriptional and intracellular signaling programs.

Flow cytometry analysis supports detection of endogenous GRAMD4 expression in human cells. HuProt(TM) protein microarray specificity validation with clone PCRP-GRAMD4-1A10 further demonstrates highly selective recognition of GRAMD4 among more than 19,000 full-length human proteins. The combined validation profile supports use of this mouse monoclonal antibody for investigations involving apoptosis signaling, mitochondrial regulatory proteins, p53-associated pathways, and stress-responsive cellular signaling mechanisms.

An antibody targeting GRAMD4 can therefore support studies involving programmed cell death pathways, mitochondrial signaling regulation, stress-associated transcriptional responses, apoptosis-associated cellular biology, and p53-mediated signaling networks.

GRAMD4 participates in mitochondrial apoptosis signaling and stress-associated cellular regulatory pathways; explore related signaling and regulatory proteins on our Signal Transduction Antibodies landing page.

Application Notes

Optimal dilution of the GRAMD4 Antibody / Apoptosis Regulation Marker should be determined by the researcher.

Immunogen

Recombinant full-length human GRAMD4 protein was used as the immunogen for the GRAMD4 antibody.

Storage

Aliquot the GRAMD4 antibody and store frozen at -20oC or colder. Avoid repeated freeze-thaw cycles.

Alternate Names

GRAMD4 antibody, GRAM domain-containing protein 4 antibody, Death-inducing p53 target protein 1 antibody, DIP1 antibody, Mitochondrial apoptosis protein antibody

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