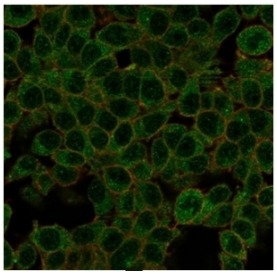
ID1 Antibody PCRP-ID1-2F11 / DNA Binding Protein Inhibitor ID-1 Antibody [clone PCRP-ID1-2F11] (V8940)

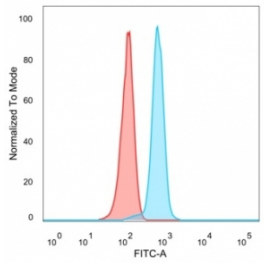
Catalog No.	Formulation	Size
V8940-100UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced), 0.05% sodium azide	100 ug
V8940-20UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced), 0.05% sodium azide	20 ug
V8940SAF-100UG	1 mg/ml in 1X PBS; BSA free, sodium azide free	100 ug

Bulk quote request

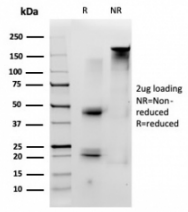
Availability	1-3 business days
Species Reactivity	Human
Format	Purified
Host	Mouse
Clonality	Monoclonal (mouse origin)
Isotype	Mouse IgG1
Clone Name	PCRP-ID1-2F11
Purity	Protein A/G affinity
UniProt	P41134
Localization	Nucleus, Cytoplasm
Applications	ELISA (order BSA-free Format For Coating) : Flow Cytometry : 1-2ug/million cells Immunofluorescence : 1-2ug/ml
Limitations	This ID1 Antibody PCRP-ID1-2F11 / DNA Binding Protein Inhibitor ID-1 Antibody is available for research use only.



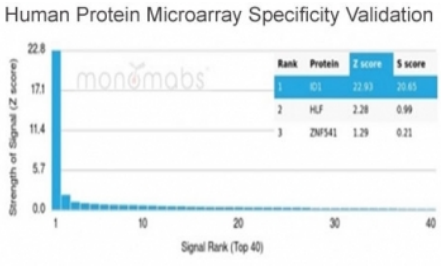
ID1 Antibody PCRP-ID1-2F11 in HeLa Cervical Cancer Cells IF. Immunofluorescence staining of PFA-fixed human HeLa cervical cancer cells using ID1 Antibody, clone PCRP-ID1-2F11 (green), with phalloidin counterstaining of the actin cytoskeleton (red). ID1 immunoreactivity is readily detected throughout the cells, with prominent intracellular fluorescence distinct from the red cytoskeletal staining. This result demonstrates detection of DNA Binding Protein Inhibitor ID-1 in human cervical cancer cells.



ID1 Antibody PCRP-ID1-2F11 in HeLa Cervical Cancer Cells FACS. Flow cytometry analysis of PFA-fixed human HeLa cervical cancer cells using ID1 Antibody, clone PCRP-ID1-2F11. The ID1-stained population (blue) shows a clear rightward fluorescence shift relative to the isotype control (red), demonstrating specific detection of intracellular ID1. The distinct separation between the two populations supports recognition of DNA Binding Protein Inhibitor ID-1 in fixed and permeabilized HeLa cells.



Purified ID1 Antibody PCRP-ID1-2F11 SDS-PAGE. SDS-PAGE analysis of 2 ug purified, BSA-free ID1 Antibody, clone PCRP-ID1-2F11, under reducing (R) and non-reducing (NR) conditions. The reduced preparation shows the expected antibody heavy and light chain components near approximately 50 and 25 kDa, respectively, while the non-reduced antibody migrates as intact immunoglobulin near approximately 150 kDa. This analysis confirms the integrity and purity of the DNA Binding Protein Inhibitor ID-1 Antibody preparation.



ID1 Antibody PCRP-ID1-2F11 Protein Microarray Validated. Protein microarray analysis of ID1 Antibody, clone PCRP-ID1-2F11, using the HuProt array containing more than 19,000 full-length human proteins. ID1 produced the highest-ranked signal, with a Z-score of 22.9 and S-score of 18.8, demonstrating strong preferential recognition of the intended target. The Z-score represents signal strength in standard deviations above the mean of all array signals, while the S-score measures separation between the intended target and the next-highest ranked protein. This result supports the specificity of the DNA Binding Protein Inhibitor ID-1 Antibody.

Description

ID1 Antibody PCRP-ID1-2F11 / DNA Binding Protein Inhibitor ID-1 Antibody recognizes ID1, a member of the inhibitor of DNA binding/inhibitor of differentiation family of helix-loop-helix proteins. ID1 contains an HLH dimerization domain but lacks the basic DNA-binding region found in conventional basic helix-loop-helix transcription factors. As a result, ID1 can associate with bHLH proteins and form heterodimers that are unable to bind their normal DNA recognition sequences, thereby modulating transcriptional programs involved in cellular differentiation and proliferation.

The ID protein family includes ID1, ID2, ID3, and ID4. These proteins participate in the regulation of cell fate by antagonizing bHLH transcription factors, including E proteins that control differentiation-associated gene expression. ID1 expression is generally associated with proliferative and relatively undifferentiated cellular states, whereas its downregulation can accompany lineage commitment and differentiation. Through these interactions, DNA Binding Protein Inhibitor ID-1 contributes to the balance between proliferation, differentiation, senescence, and cellular survival.

ID1 has also received substantial attention in cancer research. Altered ID1 expression has been described in multiple tumor types and has been investigated in relation to tumor-cell proliferation, invasion, migration, angiogenesis, metastasis, and treatment response. Its biological effects are context dependent and intersect with multiple regulatory networks, including pathways involving KRAS, EGFR, PI3K/AKT, BMP, and other signaling systems.

Clone PCRP-ID1-2F11 is a mouse monoclonal antibody directed against human ID1. As a clone-specific reagent, PCRP-ID1-2F11 provides researchers with a defined monoclonal option for investigating this differentiation-associated regulatory protein. ID1 is particularly relevant to studies examining transcriptional regulation, cell-fate determination, stem and progenitor cell biology, and mechanisms associated with malignant transformation.

NSJ Bioreagents offers clone PCRP-ID1-2F11 for research into ID1 expression and its role in cellular regulation. An ID1 Antibody can support investigation of differentiation, proliferation, transcriptional regulation, developmental biology, and

ID1-associated cancer mechanisms.

Explore our Cancer Marker Antibodies page for additional reagents targeting proteins associated with tumor development, proliferation, differentiation, and cancer progression.

Application Notes

Optimal dilution of the ID1 Antibody PCRP-ID1-2F11 / DNA Binding Protein Inhibitor ID-1 Antibody should be determined by the researcher.

Immunogen

A portion of amino acids 5-150 was used as the immunogen for the ID1 Antibody PCRP-ID1-2F11.

Storage

Aliquot the ID1 Antibody PCRP-ID1-2F11 and store frozen at -20oC or colder. Avoid repeated freeze-thaw cycles.

Alternate Names

ID1 antibody, DNA binding protein inhibitor ID-1 antibody, Inhibitor of DNA binding 1 antibody, Inhibitor of differentiation 1 antibody, ID-1 antibody

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