ARG62846
anti-CD42b antibody [HIP1]

Package: 100 µg
Store at: -20°C

Summary

Product Description	Mouse Monoclonal antibody [HIP1] recognizes CD42b
Tested Reactivity	Hu, NHuPrm
Tested Application	CyTOF®-candidate, FACS, FuncSt, IHC-Fr
Specificity	The clone HIP1 reacts with CD42b (GPIb alpha), a 135-145 kDa membrane glycoprotein expressed on platelets and megakaryocytes. CD42b and CD42c (GPIb beta) are composed in a disulfide linked heterodimer (CD42b/c; 160 kDa); CD42b/c forms a noncovalent complex with CD42a and CD42d. HLDA IV; WS Code P 40
Host	Mouse
Clonality	Monoclonal
Clone	HIP1
Isotype	IgG1
Target Name	CD42b
Immunogen	Peripheral blood mononuclear cells of a patient suffering with CLL.
Conjugation	Un-conjugated
Alternate Names	CD antigen CD42b; Antigen CD42b-alpha; DBPLT3; VWDP; CD42B; GP-Ib alpha; Glycoprotein Ibalpha; BDPLT1; BSS; CD42b-alpha; GPIbA; GPIb-alpha; Platelet glycoprotein Ib alpha chain; BDPLT3; GP1B

Application Instructions

Application table

Application	Dilution
CyTOF®-candidate	Assay-dependent
FACS	1 - 4 µg/ml
FuncSt	Assay-dependent
IHC-Fr	Assay-dependent

Application Note: Functional studies: The clone HIP1 inhibits the ristocetin-dependent binding of von Willebrand Factor (vWF) to platelets and ristocetin-induced platelet agglutination.
* The dilutions indicate recommended starting dilutions and the optimal dilutions or concentrations should be determined by the scientist.

Properties

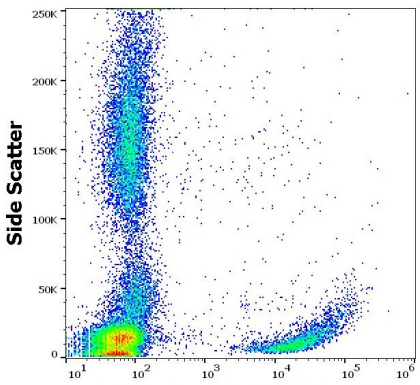
Form	Liquid
Purification	Purified by protein A
Purity	> 95% (by SDS-PAGE)
Buffer	PBS (pH 7.4) and 15 mM Sodium azide

Preservative	15 mM Sodium azide
Concentration	1 mg/ml
Storage instruction	For continuous use, store undiluted antibody at 2-8°C for up to a week. For long-term storage, aliquot and store at -20°C or below. Storage in frost free freezers is not recommended. Avoid repeated freeze/thaw cycles. Suggest spin the vial prior to opening. The antibody solution should be gently mixed before use.
Note	For laboratory research only, not for drug, diagnostic or other use.

Bioinformation

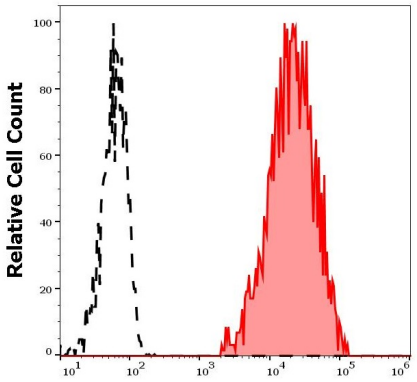
Database links	GeneID: 2811 Human Swiss-port # P07359 Human
Gene Symbol	GP1BA
Gene Full Name	glycoprotein Ib (platelet), alpha polypeptide
Background	CD42b (GPIb alpha) composes together with GPIb beta, GPIX and GPV the GPIb-IX-V receptor complex critical in the process of platelet-rich thrombus formation by tethering the platelet to a thrombogenic surface. CD42b binds to von Willebrand factor (VWF) exposed at a site of vascular injury, as well as to thrombin, coagulation factors XI and XII, high molecular wight kininogen, TSP-1, integrin Mac-1 and P-selectin. The extracellular domain of CD42b by its interactions also contributes to metastasis.
Function	GP-Ib, a surface membrane protein of platelets, participates in the formation of platelet plugs by binding to the A1 domain of vWF, which is already bound to the subendothelium. [UniProt]
Highlight	Related products: CD42b antibodies; Anti-Mouse IgG secondary antibodies; Related news: CyTOF-candidate Antibodies
Research Area	Cell Biology and Cellular Response antibody; Immune System antibody
Calculated Mw	72 kDa
PTM	Glycocalicin, which is approximately coextensive with the extracellular part of the molecule, is cleaved off by calpain during platelet lysis.

Images



ARG62846 anti-CD42b antibody [HIP1] FACS image

Flow Cytometry: Human peripheral blood cells stained with ARG62846 anti-CD42b antibody [HIP1] at 4 µg/ml dilution, followed by APC-conjugated Goat anti-Mouse antibody.



ARG62846 anti-CD42b antibody [HIP1] FACS image

Flow Cytometry: Separation of human thrombocytes (red-filled) from CD42b negative lymphocytes (black-dashed). Human peripheral whole blood stained with ARG62846 anti-CD42b antibody [HIP1] at 4 µg/ml dilution, followed by APC-conjugated Goat anti-Mouse antibody.