



11-367-C100

## Monoclonal Antibody to CD42b Purified Antibody (0.1 mg)

Clone: HIP1

**Isotype:** Mouse IgG1

Specificity: The antibody HIP1 reacts with CD42b (GPIb alpha), a 135-145 kDa membrane

glycoprotein expressed on platelets and megakaryocytes. CD42b and CD42c (GPlb 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

Regulatory Status: RUO

**Immunogen:** Peripheral blood mononuclear cells of a patient suffering with CLL.

Species Reactivity: Human, Non-Human Primates

**Application:** Flow Cytometry

Immunohistochemistry (frozen sections)

**Functional Application** 

The antibody HIP1 inhibits the ristocetin-dependent binding of von Willebrand

Factor (vWF) to platelets and ristocetin-induced platelet agglutination.

**Purity:** > 95% (by SDS-PAGE)

**Purification:** Purified by protein-A affinity chromatography

Concentration: 1 mg/ml

Storage Buffer: Phosphate buffered saline (PBS) with 15 mM sodium azide, approx. pH 7.4

Storage / Stability: Store at 2-8°C. Do not freeze. Do not use after expiration date stamped on vial

label.

Expiration: See vial label

Lot Number: See vial label

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.



## PRODUCT DATA SHEET

## References:

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\*Vanhoorelbeke K, Ulrichts H, Van de Walle G, Fontayne A, Deckmyn H: Inhibition of platelet glycoprotein lb and its antithrombotic potential. Curr Pharm Des. 2007;13(26):2684-97.

\*Jain S, Zuka M, Liu J, Russell S, Dent J, Guerrero JA, Forsyth J, Maruszak B, Gartner TK, Felding-Habermann B, Ware J. Platelet glycoprotein lb alpha supports experimental lung metastasis. Proc Natl Acad Sci U S A. 2007 May 22;104(21):9024-8.

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\*Takahashi R, Sekine N, Nakatake T: Influence of monoclonal antiplatelet glycoprotein antibodies on in vitro human megakaryocyte colony formation and proplatelet formation. Blood. 1999 Mar 15;93(6):1951-8.

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