

# anti-human CD41b

## Monoclonal Antibody HIP2 to CD41b (Human)

Cat-No: **21819411**

100 µg in 100 µl

**Clone:** HIP2

**Specificity:** The antibody HIP2 recognizes a 140 kDa glycoprotein which is the  $\alpha$  subunit of the CD41/CD61 (GPIIb/IIIa,  $\alpha$ IIb $\beta$ 3) complex called glycoprotein IIb (GPIIb). GPIIb is a calcium-dependent, noncovalently associated heterodimer and contains a heavy chain (GPIIb $\alpha$ ) and a light chain (GPIIb $\beta$ ) linked by a single disulfid bond. CD41 antigen is restrictedly expressed by platelets and platelet precursors (megakaryocytes). CD41/CD61 complex is the receptor of fibrinogen, fibronectin and von Willebrand factor, and plays a central role in platelet activation and aggregation. The GPIIb/IIIa may be absent or strongly reduced in Glanzmann's thrombasthenia (GT):

**Isotype subclass:** Mouse IgG3

**Form:** Purified from ascites by protein-G affinity chromatography.

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

**Physical state:** Liquid

**Buffer/Additives/Preservative:** PBS containing 0.09 % sodium azide (pH 7.2).

**Expiration date:** The reagent is stable until the expiry date stated on the vial label.

**Storage conditions:** Store at 4°C. For long-term storage aliquot and store at -20°C. Avoid freeze/thaw cycles.

**Application:** Flow Cytometry, Immunohistochemistry (frozen sections)

### References:

- \* Knapp W., B.Dorken, E.P. Rieber, et al., eds. 1989. Leukocyte Typing IV: White Cell Differentiation Antigens, Oxford University Press
- \* Tadimitsu K, K. Hitoshi, A.E.G:Kr. van dem Borne, et al., eds. 1997. Leukocyte Typing VI: White Cell Differentiation Antigens, Garland Publ, Inc. New York
- \* Bao CX., Liu JW., Chen GZ., et al., 1992. Some biological characterization of monoclonal antibody HIP2 receptor on platelet membrane glycoprotein IIb. Chinese J. of Hematology

**Background:** **CD41** (platelet glycoprotein IIb) is composed of two subunits (120 kDa  $\alpha$ , alpha and 23 kDa  $\beta$ , beta) that interact with CD61 in the presence of calcium to form a functional adhesive protein receptor. Upon blood vessel damage, this receptor binds to a variety of proteins including von Willebrand factor, fibrinogen, fibronectin and vitronectin. CD41 is mainly expressed on megakaryocyte-platelet lineage, but generally belongs to the antigens that are expressed during early stages of hematopoietic differentiation.

**Warning:** Sodium azide is harmful if swallowed (R22). Keep out of reach of children (S2). Keep away from food, drink and animal feeding stuff (S13). Wear suitable protective clothing (S36). If swallowed, seek medical advice immediately and show this container or label (S46). Contact with acids liberates very toxic gas (R32). Azide compounds should be flushed with large volumes of water during disposal to avoid deposits in lead or copper plumbing where explosive conditions can develop.

This material is offered for **research use only**. Not for use in human. For in vitro use only. ImmunoTools will not be held responsible for patent infringement or other violations that may occur with the use of our products.

**ImmunoTools** Excellent Quality - Advantageously priced

Gladiolenweg 2; 26169 Friesoythe; Germany  
phone:+49-(0)4491-400997, fax:+49-(0)4491-400998, [info@immunotools.com](mailto:info@immunotools.com)  
[www.immunotools.com](http://www.immunotools.com)