

# Mouse Anti-Human PLG Monoclonal Antibody

## Mouse, Monoclonal (PLG)

Cat. No. DMAB2433MH

Lot. No. (See product label)

### PRODUCT INFORMATION

**Antigen Description:** This gene encodes a small membrane glycoprotein found on the surface of human platelets. It forms a 1-to-1 noncovalent complex with glycoprotein Ib, a platelet surface membrane glycoprotein complex that functions as a receptor for von Willebrand factor. The complete receptor complex includes noncovalent association of the alpha and beta subunits with the protein encoded by this gene and platelet glycoprotein V. Defects in this gene are a cause of Bernard-Soulier syndrome, also known as giant platelet disease. These patients have unusually large platelets and have a clinical bleeding tendency.

**Immunogen:** Washed human platelets

**Isotype:** Ig G<sub>2a</sub>

**Specificity:** CD42a antigen (GPIIX) is a transmembrane glycoprotein of 22kDa which forms a non-covalent complex with CD42b (GPIb), CD42c and CD42d (GPV). It is found on platelets and megakaryocytes. SZ1 reacts with CD42a only within the intact CD42a-d complex.

**Clone:** TZ2

**Host animal:** Mouse. Hybridization of X63.Ag.8 myeloma cells with spleen cells from BALB/c mice.

**Source:** Ascites

**Format:** FITC, Liquid

**Purification:** Ion exchange or affinity chromatography

**Application:** Studies of platelet functions

Identification of GPIb/GP IX complex (immunoprecipitation)

Binding studies

Immunoprecipitation

**Fluorescence microscopy or flow cytometry:** 20µl/5x10<sup>5</sup> cells or 10<sup>6</sup> platelets/test

Each laboratory should determine an optimum working titer for use in its particular application. Other applications have not been tested but use in such assays should not necessarily be excluded. Centrifuge before opening to ensure complete recovery of vial contents.

### PACKAGING

**Buffer:** 0.01M Sodium phosphate, 0.145M Sodium chloride, pH 7.2 containing 2mg/ml BSA

**Storage:** Store (in the dark) at 2–8°C. DO NOT FREEZE!

**Warning:** This product contains sodium azide, which has been classified as Xn (Harmful), in European Directive 67/548/EEC in the concentration range of 0.1–1.0%. When disposing of this reagent through lead or copper plumbing, flush with copious volumes of water to prevent azide build-up in drains.

### ANTIGEN GENE INFORMATION

**Gene Name:** [GP9 glycoprotein IX \(platelet\) / Homo sapiens](#)

**Official Symbol:** GP9

**Synonyms:** GPIX; CD42a; GP9 platelet glycoprotein IX; GP-IX; glycoprotein 9; OTTHUMP00000217111

**GeneID:** [2815](#)

**mRNA Refseq:** [NM\\_000174](#)

**Protein Refseq:** [NP\\_000165](#)

**MIM:** [173515](#)

**UniProt ID:** P14770

**Chromosome Location:** 3q21.3

**Pathway:** ECM-receptor interaction, organism-specific biosystem; Formation of Fibrin Clot (Clotting Cascade), organism-specific biosystem; GP1b-IX-V activation signalling, organism-specific biosystem; Hematopoietic cell lineage, organism-specific biosystem; Hemostasis, organism-specific biosystem; Intrinsic Pathway, organism-specific biosystem; Platelet Activation, organism-specific biosystem; Platelet Aggregation (Plug Formation), organism-specific biosystem; Platelet activation triggers, organism-specific biosystem; vWF interaction with collagen, organism-specific biosystem

**Function:** protein binding

### REFERENCES

1. Michelson, A.D., (1995), "CD42 cluster workshop report", Leucocyte Typing V, White Cell Differentiation Antigens, Schlossman, S.F., et al., Eds., Oxford University Press, 1309-1310.
2. Lopez, J.A., et al., (1998), "Bernard-Soulier Syndrome", Blood, 12, 19, 4397-4418.