

Anti-Human GPIb α mAb P3

PRODUCT DESCRIPTION

P3 reacts with the NH₂-terminal region of human GpIb α which is also known as CD42b. Expressed as component of a hetero-oligomeric membrane complex together with GpIb β , GPIX, and GPV, GPIb α binds proteins involved in inflammation, thrombosis, and hemostasis, of which the best characterized are von Willebrand Factor (VWF) and α -thrombin (FIIa). P3 IgG has subnanomolar affinity for GpIb α and does not inhibit FIIa nor VWF binding.

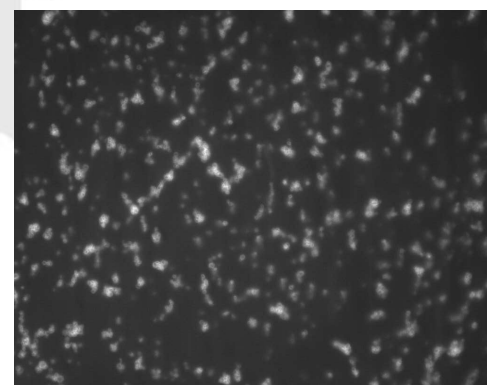
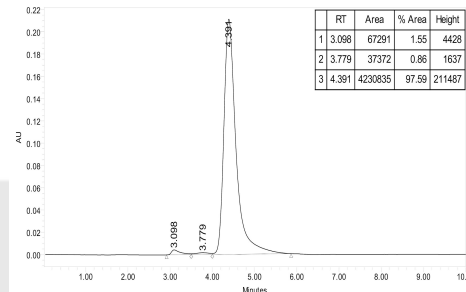
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CATALOG	MVI-1002
CLONE & ISOTYPE	Mouse IgG1, k
IMMUNOGEN	Human Platelets
CONJUGATE	Unlabeled, biotinylated, Labeled (488, 550, 650 nm)
REACTIVITY	Human
STORAGE BUFFER & CONDITIONS	PBS, pH 7.4 Cold room for <6 months, -20°C for longer storage. Avoid freezing and thawing cycles.
ENDOTOXIN LEVEL	N/A
SOURCE	Purified from hybridoma supernatant by protein G chromatography.
PURITY	>90% determined by HPLC-SEC.



Representative HPLC-SEC run of a production lot (top) and platelet aggregates rolling over collagen, visualized with P3Fab fluorescently labeled

SUGGESTED APPLICATIONS AND CONCENTRATIONS

P3 recognize the native conformation of GPIb, therefore it should work in any application in which the antigen (GPIb) is in its native conformation. These are some, but not all common Applications, please write us for more information.

Ex-vivo phenotyping:

Dilute whole blood 1:50 and incubate with P3 IgG at 1 μ g/ml for 15 minutes at room temperature, or P3 Fab 3 μ g/ml then dilute the blood 20 times more and analyze by FACS if using directly conjugated mAbs, alternatively proceed with a secondary antibody according to manufacturer instructions.

Immunoprecipitation experiments:

Incubate platelets with 5 μ g/ml of P3 IgG for 4 hours at RT or overnight at 4 C, proceed with your own IP protocol.

Ex-vivo under flow experiments - Only P3Fab-Directly labeled:

Incubate human blood with 3 μ g/ml of P3 Fab for 2 minutes before your experiment.

PUBLICATIONS

Handa M, Titani K, Holland LZ, Roberts JR, Ruggeri ZM. The von Willebrand factor-binding domain of platelet membrane glycoprotein Ib. Characterization by monoclonal antibodies and partial amino acid sequence analysis of proteolytic fragments. The Journal of biological chemistry. 1986;261(27):12579-85. Epub 1986/09/25. PubMed PMID: 2943738.

Gong H, Shen B, Flevaris P, Chow C, Lam SC, Voyno-Yasenetskaya TA, Kozasa T, Du X. G protein subunit Galpha13 binds to integrin alphallbbeta3 and mediates integrin "outside-in" signaling. Science (New York, NY). 2010;327(5963):340-3. Epub 2010/01/16. doi: 10.1126/science.1174779. PubMed PMID: 20075254; PMCID: PMC2842917.

Yin H, Stojanovic-Terpo A, Xu W, Corken A, Zakharov A, Qian F, Pavlovic S, Krbanjevic A, Lyubimov AV, Wang ZJ, Ware J, Du X. Role for platelet glycoprotein Ib-IX and effects of its inhibition in endotoxemia-induced thrombosis, thrombocytopenia, and mortality. Arteriosclerosis, thrombosis, and vascular biology. 2013;33(11):2529-37. Epub 2013/09/21. doi: 10.1161/atvbaha.113.302339. PubMed PMID: 24051142; PMCID: PMC4043446.

Tomer A, Scharf RE, McMillan R, Ruggeri ZM, Harker LA. Bernard-Soulier syndrome: quantitative characterization of megakaryocytes and platelets by flow cytometric and platelet kinetic measurements. European journal of haematology. 1994;52(4):193-200. Epub 1994/04/01. PubMed PMID: 8005229.