

Mouse Anti-CD180/RP105 [MHR73-11]: MC0313

Intended Use: For Research Use Only

Description: The CD180 or RP105, BGP95, LY64) is a type I membrane glycoprotein of Toll-like receptor (TLR) family. Its cytoplasmic tail is short and unlike the TLRs, it lacks the TIR domain. CD180 expression depends on the coexpression of its helper molecule, MD-1, and mirrors that of TLR4 on antigen-presenting cells. CD180 regulates recognition of LPS and signaling in B cells, via interacting directly with the TLR4 signaling complex, inhibiting its ability to bind microbial ligands. Ligation of CD180 by monoclonal antibodies leads to B cell activation, upregulation of CD80/CD86, and increase in cell size.

Specifications

Clone: MHR73-11
Source: Mouse
Isotype: IgG1k
Reactivity: Human, Baboon, Cynomolgus, African Green, Rhesus
Localization: Membrane
Formulation: Antibody PBS pH 7.4, containing BSA and $\leq 0.09\%$ sodium azide (NaN₃)
Storage: Store at 2°- 8°C
Applications: IHC, Flow Cyt., IP, WB
Package:

Description	Catalog No.	Size
CD180/RP105 Concentrated	MC0313	1 ml

IHC Procedure*

Positive Control Tissue: Spleen tissue lysate
Concentrated Dilution: 10-100
Pretreatment: Citrate pH6.0 or EDTA pH8.0, 15 minutes using Pressure Cooker, or 30-60 minutes using water bath at 95°-99°C
Incubation Time and Temp: 30-60 minutes @ RT
Detection: Refer to the detection system manual

* Result should be confirmed by an established diagnostic procedure.

References:

1. Discordant frequencies of tissue-resident and circulating CD180-negative B cells in chronic rhinosinusitis. Miljkovic D, et al. Int Forum Allergy Rhinol. Jun;7(6):609-614, 2017.
2. TLR4 Accessory Molecule RP105 (CD180) Regulates Monocyte-Driven Arteriogenesis in a Murine Hind Limb Ischemia Model. Bastiaansen AJ, et al. PLoS One 9:e99882, 2014. TLR accessory molecule RP105 (CD180) is involved in post-interventional vascular remodeling and soluble RP105 modulates neointima formation. Karper JC, et al. PLoS One. Jul 2;8(7):e67923, 2013.
3. RP105 is associated with MD-1 and transmits an activation signal in human B cells. Miura Y, et al. Blood 92:2815-22, 1998.