

CERTIFICATE OF ANALYSIS – TECHNICAL DATA SHEET

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|-----------------------|--------------------------------|----------------------|-----------|
| Product name | CD180, Mouse, clone RP/14 | | |
| Catalog number | HM1031-20UG | | |
| Lot number | - | Expiry date | - |
| Volume | 200 µl | Amount | 20 µg |
| Formulation | 0.2 µm filtered in PBS+0.1%BSA | Concentration | 100 µg/ml |
| Host Species | Rat IgG2a | Conjugate | None |
| Endotoxin | < 24 EU/mg | Purification | Protein G |
| Storage | 4°C | | |

Application notes

| | IHC-F | IHC-P | IF | FC | FS | IA | IP | W |
|-------------|-------|-------|----|----|----|----|----|---|
| Reference # | | | | | | | | |
| Yes | | | | • | • | | | |
| No | | | | | | | | |
| N.D. | • | • | • | | | • | • | • |

N.D.= Not Determined; IHC = Immuno histochemistry; F = Frozen sections; P = Paraffin sections; IF = Immuno Fluorescence; FC = Flow Cytometry; FS = Functional Studies; IA = Immuno Assays; IP = Immuno Precipitation; W = Western blot

Dilutions to be used depend on detection system applied. It is recommended that users test the reagent and determine their own optimal dilutions. The typical starting working dilution is 1:50.

- FS: the antibody can be used for B cell activation in functional studies.

General Information

Description Radioprotective 105 (RP105, CD180) is a type 1 transmembrane protein of 105 kDa with extracellular leucine-rich repeats (LLRs) and a short cytoplasmic tail. RP105, assigned as CD180, is similar to Drosophila Toll in the extracellular LLRs. Radioprotective 105 (RP105, CD180) expression is largely restricted to immune cells including CD19+ B cells and macrophages. Histological studies showed that RP105 is expressed mainly on mature B cells in mantle zones. Antibody-mediated (RP/14) cross-linking of RP105 induces resistance against irradiation-induced apoptosis, B-cell proliferation, and up-regulation of a costimulatory molecule B7.2, revealing RP105 as a potent regulator of B-cell activation. RP105 (CD180) has an important role in B-cell activation by LPS. It is important to note that RP105 associates with MD1, which is in this context important for RP105 with respect to B-cell surface expression and LPS recognition and signalling. MD-1 seems to be requisite for efficient expression of RP105.

Aliases RP105, Ly78, Radioprotective 105

- References**
1. Miyake, K et al; Mouse MD-1, a molecule that is physically associated with RP105 and positively regulates its expression. J Immunol 1998, 161: 1348
 2. Nagai, Y et al; Requirement for MD-1 in cell surface expression of RP105/CD180 and B-cell responsiveness to lipopolysaccharide. Blood 2002, 99: 1699

Storage&stability Product should be stored at 4°C. Under recommended storage conditions, product is stable for at least one year.

Precautions For research use only. Not for use in or on humans or animals or for diagnostics. It is the responsibility of the user to comply with all local/state and federal rules in the use of this product. Hycult Biotech is not responsible for any patent infringements that might result from the use or derivation of this product.

We hereby certify that the above-stated information is correct and that this product has been successfully tested by the Quality Control Department. This product was released for sale according to the existing specifications. This document has been produced electronically and is valid without a signature.

Approved by Manager of QC
Brenda Teunissen

Date
26/10/2020

Do you have any questions or comments regarding this product? Please contact us via support@hycultbiotech.com.