

Datasheet for 113-4139**Sheep Red Blood Cell RBC Antibody****Overview**

Description:	Anti-Sheep Red Blood Cell (RBC) (RABBIT) Antibody - 113-4139
Item No.:	113-4139
Size:	2 mL
Applications:	Agglutination, Cellular Assay, Functional Assay
Host Species:	Rabbit

Product Details

Background:	Anti-SHEEP Red Blood Cell Antibody may be used in hemagglutination assays. Haemagglutination assay or HA is a method of quantification for viruses or bacteria by hemagglutination. Some viral families and many bacteria have envelope or surface proteins which are able to agglutinate (stick to) human or animal red blood cells (RBC) and bind to N-acetylneuraminic acid. As each of the agglutinating molecule attaches to multiple RBCs, a lattice-structure will form. Normally, a virus dilution (e.g. 2-fold from 1:4 to 1:4096) will be applied to an RBC dilution (e.g. 0.1% to 0.7% in steps of 0.2%) for approx. 30 min, often at 4° C, otherwise viruses with neuraminidase activity will detach the virus from the RBCs. Then the lattice forming parts will be counted and the titer calculated. The titer of a hemagglutination assay is determined by the last viable "lattice" structure found. This is because it is at the point where, if diluted anymore, the amount of Virus particles will be less than that of the RBCs and thus not be able to agglutinate them together. Anti-SHEEP Red Blood Cell Antibody is used to sensitize erythrocytes and quantitate agglutination.
Synonyms:	rabbit Anti-sheep RBC antibody, Red Blood Cell Antibody, Antibody for hemagglutination, rabbit anti-sheep red blood cell, rabbit antibody to sheep Red Blood Cells (RBC), haemolysin, hemolysin, erythrocytes sensitizing agent, anti-erythrocyte, anti-erythrocyte antibody
Host Species:	Rabbit
Clonality:	Polyclonal
Format:	Antiserum

Target Details

Immunogen Type:	Other
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Immunogen:	Sheep washed pooled Red Blood Cells (RBC)
Purity/Specificity:	This product was prepared from polyspecific antiserum by delipidation and defibrination.
Relevant Links:	• 113-4139 SDS

Application Details

Tested Applications:	Agglutination
Suggested Applications:	Cellular Assay, Functional Assay (Based on references)
Application Note:	Tested for agglutination of cells on titer plates. 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.
Assay Dilutions:	All assays should be optimized by the user. Recommended dilutions (if any) may be listed below.

Tissue Data

Tissue Type:	Red Blood Cells
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Formulation

Physical State:	Lyophilized
Concentration:	85 mg/mL by Refractometry
Buffer:	0.02 M Potassium Phosphate, 0.15 M Sodium Chloride, pH 7.2
Sterility:	Non-sterile
Preservative:	0.01% (w/v) Sodium Azide
Stabilizer:	None
Reconstitution Volume:	2.0 mL
Reconstitution Buffer:	Restore with deionized water (or equivalent)

Shipping & Handling

Shipping Condition:	Ambient
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Storage Condition: Store vial at 4° C prior to restoration. For extended storage aliquot contents and freeze at -20° C or below. Avoid cycles of freezing and thawing. Centrifuge product if not completely clear after standing at room temperature. This product is stable for several weeks at 4° C as an undiluted liquid. Dilute only prior to immediate use.

Expiration: Expiration date is one (1) year from date of receipt.

References

- Hayes BH. et al. Macrophages show higher levels of engulfment after disruption of cis interactions between CD47 and the checkpoint receptor SIRPα. *Journal of Cell Science* (2020)
- de Silva S. et al. CD40 Enhances Type I Interferon Responses Downstream of CD47 Blockade, Bridging Innate and Adaptive Immunity. *CANCER IMMUNOLOGY RESEARCH* (2020)
- Inzana TJ et al. Decoration of *Histophilus somni* lipooligosaccharide with N-acetyl-5-neuraminic acid enhances bacterial binding of complement factor H and resistance to killing by serum and polymorphonuclear leukocytes. *Vet Microbiol.* (2012)

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