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Datasheet for R407-0050

Human Red Blood Cells 10% Washed Pooled Cells

Overview

Description:	Human Red Blood Cells (RBC) 10% Washed Pooled Cells - R407-0050
Item No.:	R407-0050
Size:	50 mL
Applications:	Biochemical Assay
Origin:	Human

Product Details

Background:	Human whole blood is washed to remove the platelet rich plasma, buffy coat layer, and leukocytes (WBC). Red blood cells are supplied as a 10 percent suspension in phosphate buffered saline (PBS). Human red blood cells are useful for the titration of complement, adsorption procedures, testing for agglutinins/HA assays, and for the preparation of stroma as particulate reagents. Human red blood cells are perishable and are collected and processed upon receipt of your order.
Synonyms:	Human Washed Pooled Cells, Human WPCs, Human Red Blood Cells, Human RBCs, erythrocytes
Species of Origin:	Human

Application Details

Suggested Applications:	Biochemical Assay (Based on references)
Application Note:	Human whole blood cells are used for complement titration, adsorption procedures, HA assays and for the preparation of stroma as particulate reagents.
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
Sex:	Mixed

Strain:	Adult

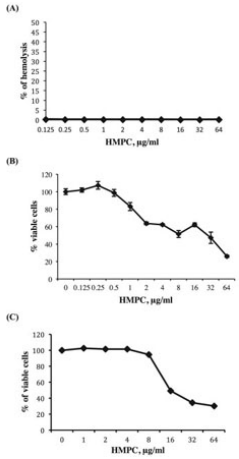
Formulation

Physical State:	Liquid
Buffer:	0.02 M Potassium Phosphate, 0.15 M Sodium Chloride, pH 7.2
Sterility:	Non-sterile
Preservative:	None
Stabilizer:	None

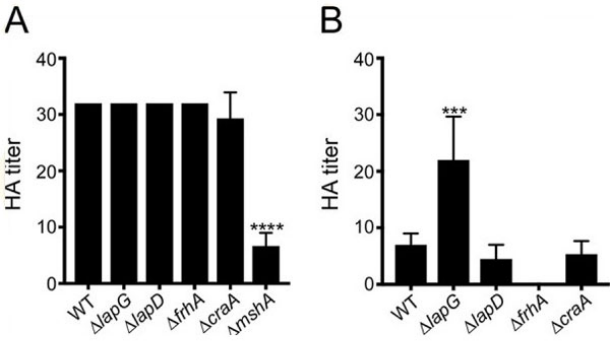
Shipping & Handling

Shipping Condition:	Wet Ice
Storage Condition:	Store human washed pooled red blood cells at 4° C prior to opening. Be advised that blood is a perishable product and exact shelf may depend on application.
Expiration:	This product MAY be stable for up to two (2) weeks if properly stored and handled.

Images



Agglutination
Mammalian cell toxicity assays. (A) HMPC hemolysis assay. Red blood cells (p/n R407-0050) were diluted to 2% with PBS and then incubated with HMPC over the concentration range 0.125−64 µg/ml. (B) Cytotoxicity of HMPC towards HKC-8 cells. HKC-8 cells were treated with increasing concentrations of HMPC for 24 hours before assessing viability using a WST-1 assay. (C) Cytotoxicity of HMPC towards HepG2 cells. HepG2 cells were treated with increasing concentrations of HMPC for 24 hours before assessing viability using a WST-1 assay. All experiments were repeated twice in triplicate and data show the mean +/− standard deviation. Figure 6. PMID: 29728636.



Agglutination
The LapDG system regulates hemagglutination. Hemagglutination assays were performed with V. cholerae O1 El Tor A1552 (A) or O1 classical O395 (B) strains. Either wild-type (WT) or indicated deletion mutants were used. The reciprocal of the lowest fold dilution (hemagglutinin [HA] titer) at which cells were able to agglutinate red blood cells was recorded. The graphs represent the means and standard deviations of HA titers from at least three biological replicates. One-way ANOVA and Dunnett's multiple-comparison test were used to compare the mean of each mutant to WT. Mean differences with a P value of ≤0.05 were deemed significant. ***, P ≤ 0.001; ****, P ≤ 0.0001. FIG 7. PMID: 31796544.

References

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No test method can provide total assurance that the hepatitis B virus, hepatitis C virus, human immunodeficiency virus, or any other infectious agents are absent. Thus, all blood products, including purified proteins derived from human blood sources, should be handled at Biosafety Level 2 as recommended by the CDC\NIH manual entitled Biosafety in Microbiological and Biomedical Laboratories for potentially infectious human serum, blood specimens or proteins derived from same. Source material for the human blood product supplied to your facility has been tested for the detection of HIV antibody, Hepatitis B surface antigen, antibody to Hepatitis C, HIV 1 antigen(s), antibody to HTLV - I/II, and syphilis by FDA guidelines. All units were found to be non-reactive/negative for these tests. All human blood source material is collected in FDA licensed centers and is tested with FDA approved test kits.

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