

# CD38 Monoclonal Antibody (HIT2), Super Bright™ 702, eBioscience™

Product Details	
Size	100 Tests
Species Reactivity	Human
Host/Isotype	Mouse / IgG1, kappa
Recommended Isotype Control	Mouse IgG1 kappa Isotype Control (P3.6.2.8.1), Super Bright™ 702, eBioscience™
Class	Monoclonal
Type	Antibody
Clone	HIT2
Conjugate	Super Bright™ 702
Excitation/Emission Max	413/702 nm
Form	Liquid
Concentration	5 µL/Test
Purification	Affinity chromatography
Storage buffer	PBS, pH 7.2, with BSA
Contains	0.09% sodium azide
Storage conditions	4° C, store in dark, DO NOT FREEZE!
RRID	AB_2762572

Applications	Tested Dilution	Publications
Flow Cytometry (Flow)	5 µL (0.25 µg)/test	10 Publications
ELISA (ELISA)	-	1 Publication

## Product Specific Information

**Description:** The HIT2 monoclonal antibody reacts with the human CD38 molecule, an approximately 45 kDa type II transmembrane protein. CD38 is expressed by thymocytes, peripheral B cells including plasma cells, activated T cells, and monocytes. CD38 is a counter-receptor for CD31 and has both cyclase and hydrolase enzymatic activity.

**Applications Reported:** This HIT2 antibody has been reported for use in flow cytometric analysis.

**Applications Tested:** This HIT2 antibody has been pre-diluted and tested by flow cytometric analysis of normal human peripheral blood cells. This may be used at 5 µL (0.25 µg) per test. A test is defined as the amount (µg) of antibody that will stain a cell sample in a final volume of 100 µL. Cell number should be determined empirically but can range from 10<sup>5</sup> to 10<sup>8</sup> cells/test.

Super Bright 702 is a tandem dye that can be excited with the violet laser line (405 nm) and emits at 702 nm. We recommend using a 710/50 bandpass filter. Please make sure that your instrument is capable of detecting this fluorochrome.

When using two or more Super Bright dye-conjugated antibodies in a staining panel, it is recommended to use Super Bright Complete Staining Buffer (Product # SB-4401) to minimize any non-specific polymer interactions. Please refer to the datasheet for Super Bright Staining Buffer for more information.

**Light sensitivity:** This tandem dye is sensitive to photo-induced oxidation. Please protect this vial and stained samples from

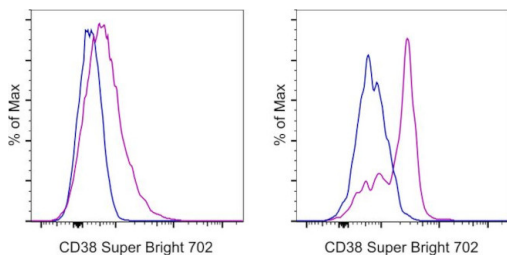
light.

Fixation: Samples can be stored in IC Fixation Buffer (Product # 00-8222-49) (100  $\mu$ L of cell sample + 100  $\mu$ L of IC Fixation Buffer) or 1-step Fix/Lyse Solution (Product # 00-5333-57) for up to 3 days in the dark at 4°C with minimal impact on brightness and FRET efficiency/compensation. Some generalizations regarding fluorophore performance after fixation can be made, but clone specific performance should be determined empirically.

Excitation: 405 nm; Emission: 702 nm; Laser: Violet Laser

Super Bright Polymer Dyes are sold under license from Becton, Dickinson and Company.

## Product Images For CD38 Monoclonal Antibody (HIT2), Super Bright™ 702, eBioscience™



### CD38 Antibody (67-0389-42) in Flow

Staining of normal human peripheral blood cells with Mouse IgG1 kappa Isotype Control, Super Bright 702 (Product # 67-4714-82) (blue histogram) or CD38 Monoclonal Antibody, Super Bright 702 (purple histogram). Cells in the lymphocyte (left) or monocyte (right) gate were used for analysis.

[View more figures on thermofisher.com](https://www.thermofisher.com)

## 11 References

### Flow Cytometry (10)

Frontiers in immunology

#### Immunometabolic interference between cancer and COVID-19.

"Published figure using CD38 monoclonal antibody (Product # 67-0389-42) in Flow Cytometry"

Authors: Consonni FM, Durante B, Manfredi M, Bleve A, Pandolfo C, Garlatti V, Vanella VV, Marengo E, Barberis E, Bottazzi B, Bombace S, My I, Condorelli G, Torri V, Sica A

Year  
2023

Aging cell

#### B cell-intrinsic changes with age do not impact antibody-secreting cell formation but delay B cell participation in the germinal centre reaction.

"Published figure using CD38 monoclonal antibody (Product # 67-0389-42) in Flow Cytometry"

Authors: Lee JL, Fra-Bido SC, Burton AR, Innocentin S, Hill DL, Linterman MA

Year  
2022

[View more Flow references on thermofisher.com](#)

### ELISA (1)

Science advances

#### Synthesis of site-specific antibody-drug conjugates by ADP-ribosyl cyclases.

"Published figure using CD38 monoclonal antibody (Product # 67-0389-42) in ELISA"

Authors: Dai Z, Zhang XN, Nasertorabi F, Cheng Q, Li J, Katz BB, Smbatyan G, Pei H, Louie SG, Lenz HJ, Stevens RC, Zhang Y

Year  
2020

### More applications with references on thermofisher.com

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