

# CD28 Monoclonal Antibody (37.51), Functional Grade, eBioscience™

Product Details	
Size	100 µg
Species	Mouse
Published Species	Mouse, Human
Expression System	Syrian hamster / IgG
Recommended Isotype Control	Syrian Hamster IgG Isotype Control, Functional Grade, eBioscience™
Class	Monoclonal
Type	Antibody
Clone	37.51
Conjugate	Functional Grade
Form	Liquid
Concentration	1 mg/mL
Purification	Affinity chromatography
Storage buffer	PBS, pH 7.2
Contains	no preservative
Storage Conditions	4° C
RRID	AB_468921

Applications	Tested Dilution	Publications
Flow Cytometry (Flow)	0.5 µg/test	38 Publications
Functional Assay (FN)	Assay-Dependent	67 Publications
ELISA (ELISA)	-	1 Publication
In vitro Assay (IV)	-	6 Publications
Miscellaneous PubMed (Misc)	-	1 Publication

## Product Specific Information

**Description:** The 37.51 monoclonal antibody reacts with the mouse CD28 molecule, a 45 kDa homodimer expressed by thymocytes, mature T cells and NK cells. CD28 is a ligand for CD80 (B7-1) and CD86 (B7-2) and is a potent costimulator of T cells. Signaling through CD28 augments IL-2 and IL-2 receptor expression as well as cytotoxicity of CD3-activated T cells.

**Applications Reported:** The 37.51 antibody has been reported for use in flow cytometric analysis. 37.51 has also been reported in costimulation of T cells in vitro and in vivo .

**Applications Tested:** The 37.51 antibody has been tested by flow cytometric analysis of mouse splenocytes. This can be used at less than or equal to 0.5 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. It is recommended that the antibody be carefully titrated for optimal performance in the assay of interest.

Storage and handling: Use in a sterile environment.

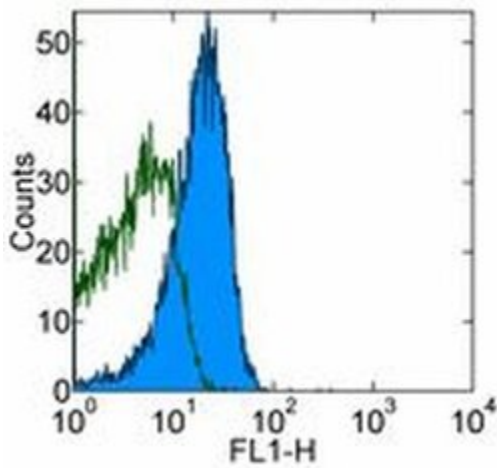
Filtration: 0.2 µm post-manufacturing filtered.

Purity: Greater than 90%, as determined by SDS-PAGE.

Endotoxin Level: Less than 0.001 ng/µg antibody, as determined by LAL assay.

Aggregation: Less than 10%, as determined by HPLC.

## Product Images For CD28 Monoclonal Antibody (37.51), Functional Grade, eBioscience™



### CD28 Antibody (16-0281-82) in Flow

Staining of BALB/c thymocytes with 0.25 µg of Golden Syrian Hamster IgG Isotype Control Functional Grade Purified (Product # 16-4914-85) (open histogram) or 0.25 µg of Anti-Mouse CD28 Functional Grade Purified (filled histogram) followed by Anti-Golden Syrian Hamster IgG FITC (Product # 11-4211-85). Cells in the lymphocyte gate were used for analysis.

## Functional Assay (67)

Chinese medicine

### ***Glossogyne tenuifolia (Hsiang-ju)* extract suppresses T cell activation by inhibiting activation of c-Jun N-terminal kinase.**

"16-0281 was used in Functional assays to study how anti-inflammatory effects exerted by GTE are mediated via suppression of JNK phosphorylation in T cell activation."

Authors: Houg JY,Tai TS,Hsu SC,Hsu HF,Hwang TS,Lin CJ,Fang LW

**Species**  
Mouse

**Dilution**  
Not Cited

**Year**  
2020

Frontiers in immunology

### **1810011o10 Rik Inhibits the Antitumor Effect of Intratumoral CD8<sup>+</sup> T Cells through Suppression of Notch2 Pathway in a Murine Hepatocellular Carcinoma Model.**

"16-0281 was used in Functional assays to disclose a novel mechanism underlying the negative regulation of antitumour CD8(+) T cells during HCC progression."

Authors: Dai K,Huang L,Huang YB,Chen ZB,Yang LH,Jiang YA

**Species**  
Mouse

**Dilution**  
Not Cited

**Year**  
2019

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

## Flow Cytometry (38)

International journal of molecular medicine

### **Downregulation of Blimp1 inhibits the maturation of bone marrow-derived dendritic cells.**

"16-0281 was used in Flow cytometry/Cell sorting to demonstrate that transduction with lenti-shRNA-Blimp1 (lentiviral-mediated B-lymphocyte-induced maturation protein-1 shRNA) modulated the maturation of DCs via MHC-II molecule suppression and inhibited alloreactive T cell activation."

Authors: Xiao J,Zhang J,Li X,Dai X,Wang J,He Y,Wei L,Shi J,Gong N

**Species**  
Mouse

**Dilution**  
1:2000

**Year**  
2019

Journal of the American Heart Association

### **K<sub>Ca</sub>3.1 Channels Promote Cardiac Fibrosis Through Mediating Inflammation and Differentiation of Monocytes Into Myofibroblasts in Angiotensin II -Treated Rats.**

"16-0281 was used in Flow cytometry/Cell sorting to evaluate the impact of the specific KCa3.1 channel blocker TRAM-34 on cardiac fibrosis."

Authors: She G,Ren YJ,Wang Y,Hou MC,Wang HF,Gou W,Lai BC,Lei T,Du XJ,Deng XL

**Species**  
Mouse

**Dilution**  
Not Cited

**Year**  
2019

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

## More applications with references on thermofisher.com

**IV (6)**   **Misc (1)**   **ELISA (1)**

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