Product Data Sheet

APC/Fire™ 750 anti-mouse CD40

Catalog # / $1223160 / 100 \mu g$

Size: $1223155 / 25 \mu g$

Clone: 3/23

Isotype: Rat IgG2a, κ

Immunogen: Recombinant mouse CD40 protein

Reactivity: Mouse

Preparation: The antibody was purified by affinity

chromatography and conjugated with

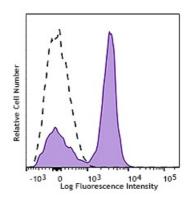
APC/Fire[™] 750 under optimal conditions.

Formulation: Phosphate-buffered solution, pH 7.2,

containing 0.09% sodium azide.

Workshop Number: 750 under optimal conditions.

Concentration: 0.2 mg/ml



C57BL/6 mouse splenocytes were stained with CD40 (clone 3/23) APC/Fire™ 750 (filled histogram) or Rat IgG2a, κ APC/Fire™ 750 isotype control (open histogram).

Applications:

Applications: Flow Cytometry

Recommended Usage:

ended Each lot of this antibody is quality

control tested by immunofluorescent staining with flow cytometric analysis. For flow cytometric staining, the suggested use of this reagent is $\leq 1.0~\mu g$ per million cells in $100~\mu l$ volume. It is recommended that the reagent be titrated for optimal performance for each

application.

* APC/Fire™ 750 has a maximum excitation of 650 nm and a maximum

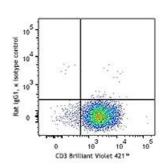
emission of 787 nm.

Application Notes:

For highly sensitive assays, we recommend Ultra-LEAF™ purified antibody (Cat. No. 124627 &124628)

with a low endotoxin limit (Endotoxin

 $< 0.01 EU/\mu g$).



C57BL/6 mouse bone marrow cells were stained with CD150 (SLAM) (clone TC15-12F12.2) APC/Fire™ 750 (filled histogram) or rat IgG2a, κ APC/Fire™ 750 isotype control (open histogram).

Application References:

1. Hasbold J, et al. 1994. Eur. J. Immunol. 24:1835.

2. Bourgeois C, et al. 2002. Science 297:2060.

Description:

CD40 is a 48 kD type I transmembrane glycoprotein also known as Bp50. It is a member of the tumor necrosis factor receptor (TNFR) superfamily and is expressed on B cells, basal epithelial cells, macrophages, follicular dendritic cells, endothelial cells, and a subset of CD34⁺ hematopoietic progenitors. CD40 regulates B cell development/maturation, Ig isotype switching and, in combination with other signals such as IL-4, protects B cells from surface Ig-induced apoptosis and promotes proliferation. Interaction of CD40 with its ligand CD154 (gp39), which is expressed on activated T cells, is important in costimulation and immune regulation.

Antigen References:

1. Grewal IS, et al. 1998. Annu Rev Immunol 16:111.