Product Data Sheet

PE anti-mouse CD20

Catalog # / $1360530 / 100 \mu g$

Size: 1360525 / 25 μg

Clone: SA271G2

Isotype: Rat IgG2b, κ

Immunogen: Mouse CD20 transfected cells

Reactivity: Mouse

Preparation: The antibody was purified by affinity

chromatography and conjugated with PE under optimal conditions. The solution is free of unconjugated PE

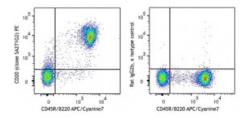
and unconjugated antibody.

Formulation: Phosphate-buffered solution, pH 7.2,

containing 0.09% sodium azide

Workshop Number: III 155

Concentration: 0.2 mg/mL



C57BL/6 mouse splenocytes were stained with CD45R/B220 APC/Cyanine7 and CD20 (clone SA271G2) PE (left) or rat IgG2b, κ PE isotype control (right).

Applications:

Applications: Flow Cytometry

Recommended Usage:

Each lot of this antibody is quality control tested by immunofluorescent

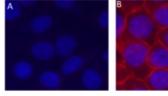
staining with flow cytometric analysis. For flow cytometric staining, the suggested use of this reagent is $\leq 0.25~\mu g$ per million cells in $100~\mu L$ volume. It is recommended that the reagent be titrated for optimal performance for each

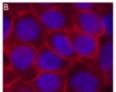
application.

Application Notes:

Additional reported applications (for the relevant formats of this clone)

include: *in vitro* blocking activity^{1,2}, immunoprecipitation³, and ELISA⁴.





A-431 cells were fixed with 4% paraformaldehyde for 10 minutes. permeabilized with ice-cold methanol for 10 minutes, and blocked with 5% FBS for 60 minutes. Cells were then intracellularly stained with 5.0 μg/mL (1:100 dilution) of either Purified Mouse IgG1, K Isotype Ctrl Antibody (Cat. No. 2607010, panel A) or purified anti-EGFR antibody (panel B) for two hours at room temperature, followed by incubation with Alexa Fluor® 594 Goat anti-mouse IgG Antibody at 2.0 µg/mL. Nuclei were counterstained with DAPI, and the image was captured with a 60X objective.

Application References:

- 1. Hirsch MS, et al. 1997. Dev. Dyn. 210:249. (Block)
- 2. Sawhney RS, et al. 2006. J. Biol. Chem. 281:8497. (Block)
- 3. Lee SA, et al. 2009. Carcinogensis. 30:1872. (IP)
- 4. Zßrate S, et al. 2004. J. Virol. 78:10839. (ELISA)

Description:

CD20 is a 33-37 kD protein, a member of the MS4A family, with four transmembrane spanning regions that present as a homo-oligomeric complexes in the cell surface when associating with MHC class I and II, CD53, CD81, and CD82. CD20 is expressed on B cells and a subset of T cells, but not on plasma cells. CD20 regulates B-cell activation and proliferation. Its ligation promotes transmembrane Ca²⁺ trafficking. CD20 is an important therapeutic target in the treatment of B cell lymphomas and leukemias.

Antigen References:

- 1. Morsy DE, et al. 2013. J. Immunol. 191:3112.
- 2. Lund FE, Randall TD. 2010. Nat. Rev. Immunol. 10:236.
- 3. Beers SA, et al. 2010. Blood 115:5191.
- 4. Kuijpers TW, et al. 2010. J. Clin. Invest. 120:214.