SONY

Product Data Sheet

PE/Cy7 anti-RPS6 Phospho (Ser235/Ser236)

Catalog # / Size: 3643025 / 25 tests
3643030 / 100 tests

Clone: A17020B

Isotype: Mouse IgG1, κ

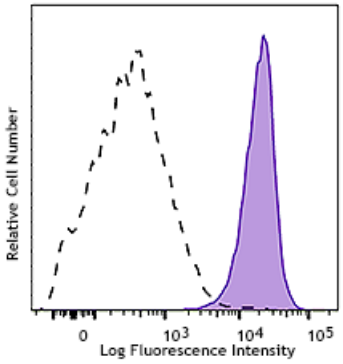
Immunogen: Synthetic peptide from human RPS6 phosphorylated at Serines 235 and 236

Reactivity: Human, Mouse

Preparation: The antibody was purified by affinity chromatography and conjugated with PE/Cy7 under optimal conditions. The solution is free of unconjugated PE/Cy7 and unconjugated antibody.

Formulation: Phosphate-buffered solution, pH 7.2, containing 0.09% sodium azide and 0.2% (w/v) BSA (origin USA).

Concentration: Lot-specific



Human peripheral blood lymphocytes were stimulated with (filled histogram) or without (open histogram) Cell Activation Cocktail without Brefeldin A (Cat. No. 423302) for 15 minutes, fixed with Fixation Buffer, permeabilied with True-Phos™ Perm Buffe

Applications:

Applications: Intracellular Flow Cytometry

Recommended Usage: Each lot of this antibody is quality control tested by intracellular flow cytometry using our True-Phos™ Perm Buffer in Whole Blood Protocol. For flow cytometric staining, the suggested use of this reagent is 5 µl per million cells or 5 µl per 100 µl of whole blood. It is recommended that the reagent be titrated for optimal performance for each application.

Application Notes: Due to complete conservation of the immunizing sequence between humans, mouse and rat, this clone is is predicted to react with rat RPS6 phosphorylated at serines 235 and 236.

Application References:

1. Jefferies HB, *et al*. 1997. *EMBO J*. 16:3693.
2. Ruvinsky I, *et al.* 2005. *Genes. Dev.*19:2199.
3. Chumacher AM, *et al*. 2006. *Biochemistry.* 45:13614
4. Roux PP,

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Description: Ribosomal protein S6 (RPS6) is a key component of the small 40S ribosomal subunit and is the major substrate of protein kinases in eukaryotic ribosomes. In response to various cellular stimuli such as mitogenic stimulation, insulin, and increased nutrient availability, upstream kinases such as RSK and p70 kinases phosphorylate RPS6 at multiple serine sites. These modifications facilitate the recruitment of the 7-methylguanasine cap complex, thereby promoting the assembly of the translational pre-initiation complex and increased cellular protein synthesis capacity. RPS6 has been shown to be hyperphosphorylated in certain cancers, and phosphorylation is a critical determinant of pancreatic β–cell size and systemic glucose homeostasis function in diabeteic mouse models.

Antigen References:

1. Jefferies HB, *et al*. 1997. *EMBO J*. 16:3693.
2. Ruvinsky I, *et al.* 2005. *Genes. Dev.*19:2199.
3. Chumacher AM, *et al*. 2006. *Biochemistry*. 45:13614
4. Roux PP*, et al*. 2007. *J. Biol. Chem*. 282:14056.
5. Stevens C, *et al.* 2009. *J. Biol. Chem*. 284:334.
6. Schlafli P, *et al.* 2011. *FEBS J*. 278:1757.