10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

Anti-Human AMPK beta 2 DyLight® 488 conjugated PRKAB2 Antibody(monoclonal, 6G1)

Catalog # ABO14792

Specification

Anti-Human AMPK beta 2 DyLight® 488 conjugated PRKAB2 Antibody(monoclonal, 6G1) - Product Information

Application	**FC**
Primary Accession	Q43741
Host	**Mouse**
Isotype	**Mouse IgG2b**
Reactivity	**Human**
Clonality	**Monoclonal**
Format	**Liquid**

Description
Anti-Human AMPK beta 2 DyLight® 488 conjugated PRKAB2 Antibody (monoclonal, 6G1) . Tested in Flow Cytometry applications. This antibody reacts with Human.

Anti-Human AMPK beta 2 DyLight® 488 conjugated PRKAB2 Antibody(monoclonal, 6G1) - Additional Information

Gene ID 5565

Other Names
5'-AMP-activated protein kinase subunit beta-2, AMPK subunit beta-2, PRKAB2

Application Details
Flow Cytometry, 1-3 µg/1x10^6 cells

Contents
Each vial contains 50% glycerol, 0.9% NaCl, 0.2% Na2HPO4, 0.02% NaN3.

Immunogen
A synthetic peptide corresponding to a sequence at the N-terminus of human AMPK beta 2, different from the related mouse sequence by three amino acids, and from the related rat sequence by two amino acids.

Cross Reactivity
No cross-reactivity with other proteins.

Storage	**At -20°C for one year from date of receipt. Avoid repeated freezing and thawing. Protect from light.**

Anti-Human AMPK beta 2 DyLight® 488 conjugated PRKAB2 Antibody(monoclonal, 6G1) - Protein Information

Name PRKAB2

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Function
Non-catalytic subunit of AMP-activated protein kinase (AMPK), an energy sensor protein kinase that plays a key role in regulating cellular energy metabolism. In response to reduction of intracellular ATP levels, AMPK activates energy-producing pathways and inhibits energy-consuming processes: inhibits protein, carbohydrate and lipid biosynthesis, as well as cell growth and proliferation. AMPK acts via direct phosphorylation of metabolic enzymes, and by longer-term effects via phosphorylation of transcription regulators. Also acts as a regulator of cellular polarity by remodeling the actin cytoskeleton; probably by indirectly activating myosin. Beta non-catalytic subunit acts as a scaffold on which the AMPK complex assembles, via its C-terminus that bridges alpha (PRKAA1 or PRKAA2) and gamma subunits (PRKAG1, PRKAG2 or PRKAG3).

Anti-Human AMPK beta 2 DyLight® 488 conjugated PRKAB2 Antibody(monoclonal, 6G1) - Protocols

Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

Anti-Human AMPK beta 2 DyLight® 488 conjugated PRKAB2 Antibody(monoclonal, 6G1) - Images

Anti-Human AMPK beta 2 DyLight® 488 conjugated PRKAB2 Antibody(monoclonal, 6G1) - Background

5'-AMP-activated protein kinase subunit beta-2 is an enzyme that in humans is encoded by the PRKAB2 gene. The protein encoded by this gene is a regulatory subunit of the AMP-activated protein kinase (AMPK). AMPK is a heterotrimer consisting of an alpha catalytic subunit, and non-catalytic beta and gamma subunits. It is an important energy-sensing enzyme that monitors cellular energy status. In response to cellular metabolic stresses, AMPK is activated, and thus phosphorylates and inactivates acetyl-CoA carboxylase (ACC) and beta-hydroxy beta-methylglutaryl-CoA reductase (HMGCR), key enzymes involved in regulating de novo biosynthesis of fatty acid and cholesterol. This subunit may be a positive regulator of AMPK activity. It is highly expressed in skeletal muscle and thus may have tissue-specific roles. Multiple alternatively spliced transcript variants have been found for this gene.