

**Anti-Human AMPK beta 2 DyLight® 550 conjugated PRKAB2 Antibody(monoclonal, 6G1)
Catalog # ABO14812****Specification****Anti-Human AMPK beta 2 DyLight® 550 conjugated PRKAB2 Antibody(monoclonal, 6G1) -
Product Information**

Application	FC
Primary Accession	O43741
Host	Mouse
Isotype	Mouse IgG2b
Reactivity	Human
Clonality	Monoclonal
Format	Liquid

Description

Anti-Human AMPK beta 2 DyLight® 550 conjugated PRKAB2 Antibody (monoclonal, 6G1) . Tested in Flow Cytometry applications. This antibody reacts with Human.

**Anti-Human AMPK beta 2 DyLight® 550 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/1x10⁶ 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® 550 conjugated PRKAB2 Antibody(monoclonal, 6G1) -
Protein Information**

Name PRKAB2

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® 550 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 Cytometry](#)
- [Cell Culture](#)

Anti-Human AMPK beta 2 DyLight® 550 conjugated PRKAB2 Antibody(monoclonal, 6G1) - Images**Anti-Human AMPK beta 2 DyLight® 550 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.