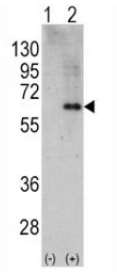
AMPK alpha 2 Antibody (F50381)

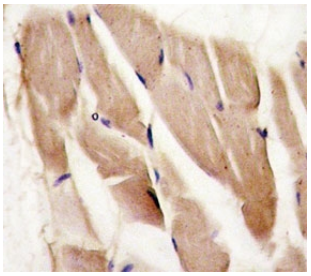
Catalog No.	Formulation	Size
F50381-0.4ML	In 1X PBS, pH 7.4, with 0.09% sodium azide	0.4 ml
F50381-0.08ML	In 1X PBS, pH 7.4, with 0.09% sodium azide	0.08 ml

Bulk quote request

Availability	1-3 business days
Species Reactivity	Human
Predicted Reactivity	Mouse, Rat
Format	Purified
Clonality	Polyclonal (rabbit origin)
Isotype	Rabbit Ig
Purity	Purified
UniProt	P54646
Applications	Western Blot : 1:1000 IHC (Paraffin) : 1:10-1:50
Limitations	This AMPK alpha 2 antibody is available for research use only.



Western blot analysis of AMPK alpha 2 antibody and 293 cell lysate (2 ug/lane) either nontransfected (Lane 1) or transiently transfected with the PRKAA2 gene (2).



IHC analysis of FFPE human skeletal muscle stained with AMPK alpha 2 antibody

Description

The protein encoded by this gene is a catalytic 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. AMPK 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. Studies of the mouse counterpart suggest that this catalytic subunit may control whole-body insulin sensitivity and is necessary for maintaining myocardial energy homeostasis during ischemia.

Application Notes

Titration of the AMPK alpha 2 antibody may be required due to differences in protocols and secondary/substrate sensitivity.

Immunogen

A portion of amino acids 453-483 from the human protein was used as the immunogen for this AMPK alpha 2 antibody.

Storage

Aliquot the AMPK alpha 2 antibody and store frozen at -20oC or colder. Avoid repeated freeze-thaw cycles.