

## Product datasheet for **TA303654**

### AMPK alpha 1 (PRKAA1) Rabbit Monoclonal Antibody [Clone ID: Y365]

#### Product data:

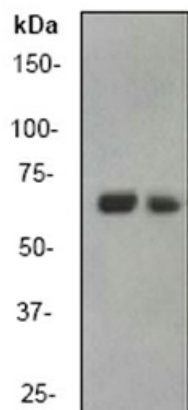
Product Type:	Primary Antibodies
Clone Name:	Y365
Applications:	FC, IHC, WB
Recommended Dilution:	FC: 1:100; WB: 1:1000 - 1:5000; IHC-P: 1:100 - 1:250; IP: 1:50
Reactivity:	Mouse, Rat, Human
Host:	Rabbit
Isotype:	IgG
Clonality:	Monoclonal
Immunogen:	A synthetic peptide corresponding to residues near the C-term of human AMPK alpha-1 subunit was used as an immunogen
Formulation:	PBS 49%, Sodium azide 0.01%, Glycerol 50%, BSA 0.05%
Purification:	IgG fraction
Conjugation:	Unconjugated
Storage:	Store at -20°C as received.
Stability:	Stable for 12 months from date of receipt.
Predicted Protein Size:	63 kDa
Gene Name:	protein kinase AMP-activated catalytic subunit alpha 1
Database Link:	<a href="#">NP_006242</a> <a href="#">Entrez Gene 65248 Rat</a> <a href="#">Entrez Gene 105787 Mouse</a> <a href="#">Entrez Gene 5562 Human</a> <a href="#">Q13131</a>
Background:	The protein encoded by this gene belongs to the ser/thr protein kinase family. It is the catalytic subunit of the 5'-prime-AMP-activated protein kinase (AMPK). AMPK is a cellular energy sensor conserved in all eukaryotic cells. The kinase activity of AMPK is activated by the stimuli that increase the cellular AMP/ATP ratio. AMPK regulates the activities of a number of key metabolic enzymes through phosphorylation. It protects cells from stresses that cause ATP depletion by switching off ATP-consuming biosynthetic pathways. Alternatively spliced transcript variants encoding distinct isoforms have been observed. [provided by RefSeq]
Synonyms:	AMPK; AMPKa1



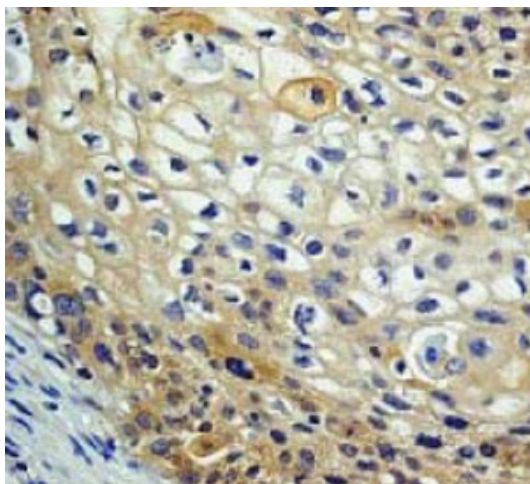
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- Note:** Is unsuitable for ICC/IF.
- Protein Families:** Druggable Genome, Protein Kinase
- Protein Pathways:** Adipocytokine signaling pathway, Hypertrophic cardiomyopathy (HCM), Insulin signaling pathway, mTOR signaling pathway, Regulation of autophagy

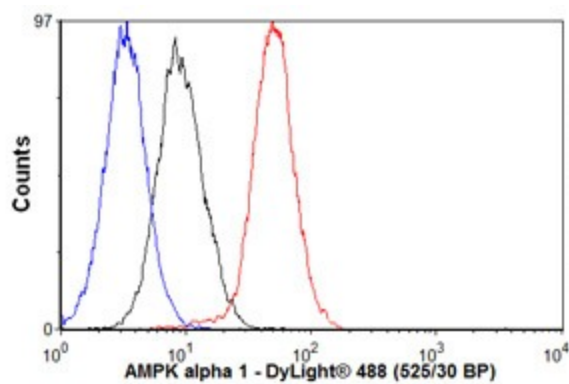
### Product images:



Western blot - AMPK alpha 1 antibody [Y365]; All lanes : Anti-AMPK alpha 1 antibody [Y365] at 1/5000 dilution. Lane 1 : MCF-7. Lane 2 : Hela. Predicted band size : 63 kDa. Observed band size : 63 kDa.



Immunohistochemistry (Paraffin-embedded sections) - AMPK alpha 1 antibody [Y365]; TA303654 at a 1:100 - 1:250 dilution staining AMPK alpha 1 in Human cervical carcinoma, using Immunohistochemistry, Paraffin Embedded Tissue.



Flow Cytometry - Anti-AMPK alpha 1 antibody; Overlay histogram showing HeLa cells stained with TA303654 (red line). The secondary antibody used was DyLight 488 goat anti-rabbit IgG (H+L) at 1:500. Isotype control antibody (black line) was rabbit IgG (monoclonal) (1ug/1x10<sup>6</sup> cells) used under the same conditions. Unlabelled sample (blue line) was also used as a control.