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PIK3CA (H1047R) (AB1579) mouse mAb

V0111

Key Features

Host Species
• Mouse

Reactivity
• Human;

Applications
• Immunohistochemistry (IHC)

MW
• 124 kDa (calculated)
• 124 kDa (observed)

Isotype
• IgG3, kappa

Recommended Dilution Ratios

Application	Dilution
Immunohistochemistry (IHC)	IHC, 1:50-1:100

Storage

Storage Conditions	Store at-20℃. Avoid freeze / thaw cycles.
Storage buffer	The antibody is provided in liquid form in phosphate - buffered saline with 50% glycerol, 0.05% BSA, and 0.05% Proclin 300.

Basic Information

Clonality	Monoclonal
Clone Number	AB1579
Immunogen	A synthetic peptide corresponding to the amino acid region 1000 - 1068 of the human PIK3CA protein.
Specificity	The antibody can specifically recognize humanPIK3CA H1047R protein.
Purification	Affinity purification Protein A
Concentration	Product concentration may vary by batch. Please refer to the product COA for details.

Target Information

Gene name	PIK3CA
Protein Name	PIK3CA H1047R

Database Link

Organism	Swiss Prot.	Gene ID
Human	P42336	5290

Background

The PIK3CA gene is located at 3Q26. 3 and encodes a 124kDa protein. The protein is composed of 85kDa regulatory subunit and 110kDa catalytic subunit. The most common mutations of PIK3CA occur in exon 9 and exon 20. H1047R, one of the most common mutations occurs in exon 20. PIK3CA plays an important role in the PI3K/AKT/mTOR signaling pathway, which can be activated by this mutation, closely related to the occurrence of tumors and disease progression. In non-small cell lung cancer, H1047R mutantion can phosphorylate Akt and activate downstream pathways to promote the survival and expansion of tumor cells.