

PIK3CA (H1047R) (AB1437) mouse mAb

W0414

Key Features

Host Species

- Mouse

Reactivity

- Human;

Applications

- IHC; WB; IF; ELISA

MW

- 124 kDa (calculated)
- 124 kDa (observed)

Isotype

- IgG2b, kappa

Recommended Dilution Ratios

Application

IHC; WB; IF; ELISA

Dilution

IHC, 1:100-1:500 | WB, 1:500-1:2000 | IF, 1:100-1:500 | ELISA, Recommended starting concentration is 1 µg/mL. Please optimize the concentration based on your specific assay requirements.

Storage

Storage Conditions

Store at -20°C. 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 AB1437

Immunogen A synthetic peptide corresponding to the amino acid region 1000 - 1068 of the human PIK3CA H1047R protein.

Specificity The antibody can specifically recognize the h1047r mutation of human PIK3CA protein, and does not react with wild-type PIK3CA 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 124 kDa protein. The protein is composed of 85 kDa regulatory subunit and 110 kDa 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 mutation can phosphorylate Akt and activate downstream pathways to promote the survival and expansion of tumor cells.