

Product Name: PIK3CA Mouse Monoclonal Antibody
Catalog #: AMM83003



Summary

| | |
|------------------------|----------------------------------|
| Production Name | PIK3CA Mouse Monoclonal Antibody |
| Description | Mouse Monoclonal Antibody |
| Host | Mouse |
| Application | IHC, ICC, FC, ELISA |
| Reactivity | Human, Mouse, Rat, Rabbit |

Performance

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|---------------------|--|
| Conjugation | Unconjugated |
| Modification | Unmodified |
| Isotype | Mouse IgG2a |
| Clonality | Monoclonal |
| Form | Liquid |
| Storage | Store at 4°C short term. Aliquot and store at -20°C long term. Avoid freeze/thaw cycles. |
| Buffer | Purified antibody in PBS with 0.05% sodium azide. |
| Purification | Affinity Purification |

Immunogen

| | |
|--------------------------|------------------|
| Gene Name | PIK3CA |
| Alternative Names | PI3K; p110-alpha |
| Gene ID | 5290.0 |
| SwissProt ID | P42336. |

Application

| | |
|-------------------------|---|
| Dilution Ratio | IHC:1:200-1:1000, ICC:1:200-1:1000, FC:1:200-1:400, ELISA:1:10000 |
| Molecular Weight | 124kDa |

Background

PIK3CA is the most mutated gene in breast cancer and is important in other cancers. An integral part of the PI3K pathway,

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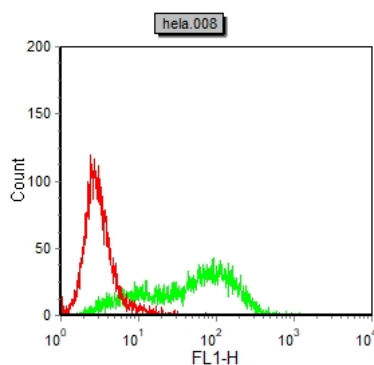


PIK3CA is an oncogene with two hotspots for activating mutations: the 542/545 region of the helical domain and the 1047 region of the kinase domain. The interaction of PIK3CA with the AKT and mTOR pathways is the subject of an immense amount of research and development, and PI3K inhibitors have exhibited some success in recent clinical trials. While PI3K monotherapies are likely insufficient, there is interest in pursuing PI3K inhibition in combination with other therapies including TKI's, MEK inhibitors, PARP inhibitors, and - in breast cancer - aromatase inhibitors.

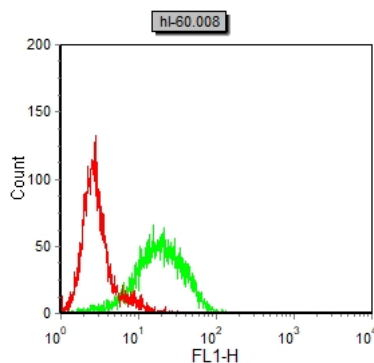
Research Area

PI3K-Akt signaling pathway

Image Data

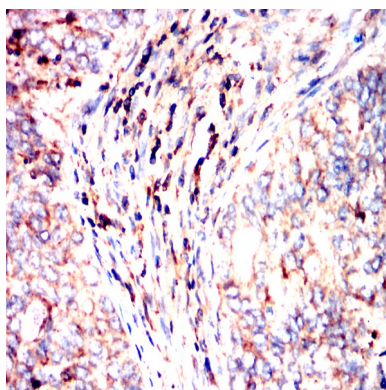


Flow cytometric analysis of HELA cells using PIK3CA mouse mAb (green) and negative control (red).

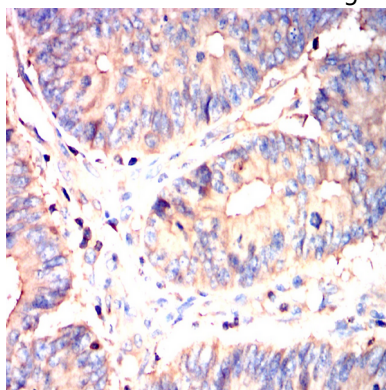


Flow cytometric analysis of HL-60 cells using PIK3CA mouse mAb (green) and negative control (red).

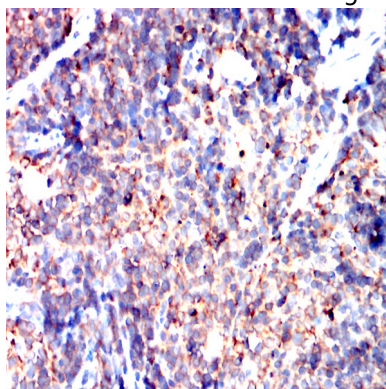
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Immunohistochemical analysis of paraffin-embedded human cervical cancer showing cytoplasmic localization using PIK3CA mouse mAb with DAB staining.

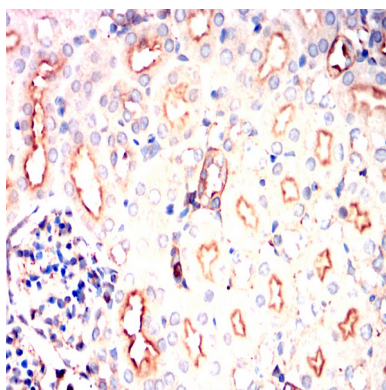


Immunohistochemical analysis of paraffin-embedded human colon cancer showing cytoplasmic localization using PIK3CA mouse mAb with DAB staining.

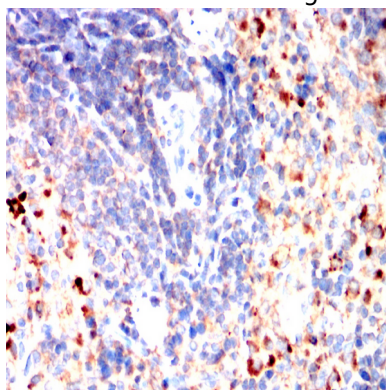


Immunohistochemical analysis of paraffin-embedded mouse spleen showing cytoplasmic localization using PIK3CA mouse mAb with DAB staining.

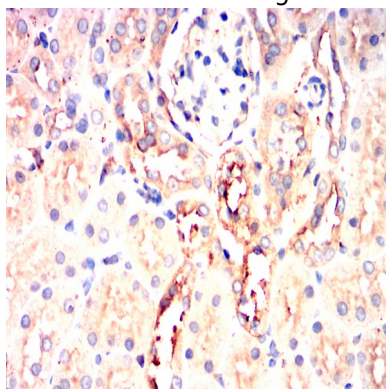
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Immunohistochemical analysis of paraffin-embedded mouse kidney showing cytoplasmic localization using PIK3CA mouse mAb with DAB staining.

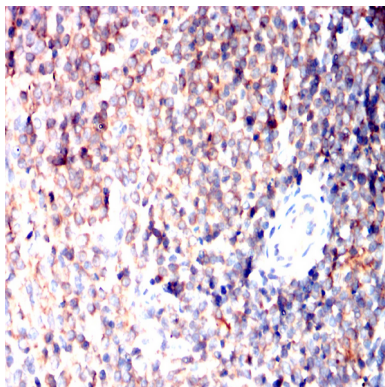


Immunohistochemical analysis of paraffin-embedded rat spleen showing cytoplasmic localization using PIK3CA mouse mAb with DAB staining.



Immunohistochemical analysis of paraffin-embedded rat kidney showing cytoplasmic localization using PIK3CA mouse mAb with DAB staining.

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Immunohistochemical analysis of paraffin-embedded rabbit spleen showing cytoplasmic localization using PIK3CA mouse mAb with DAB staining.

Note

For research use only.