**Plk 3-kinase p110α (4F3): sc-293172**

**BACKGROUND**

Phosphatidylinositol 3-kinase (Plk 3-kinase) is composed of p85 and p110 subunits. P85 lacks Plk 3-kinase activity and acts as an adapter, coupling p110 to activated protein tyrosine kinase. Two forms of p85 have been described (p85α and p85β), each possessing one SH3 and two SH2 domains. Various p110 isoforms have been identified. P110α and p110β interact with p85α, and p110α has also been shown to interact with p85β in vitro. P110α expression is restricted to white blood cells. It has been shown to bind p85α and β, but it apparently does not phosphorylate these subunits. P110α seems to have the capacity to autophrosphorylate. P110γ does not interact with the p85 subunits. It has been shown to be activated by α and βγ heterotrimeric G proteins.

**REFERENCES**


**CHROMOSOMAL LOCATION**

Genetic locus: PIK3CA (human) mapping to 3q26.32, Pik3ca (mouse) mapping to 3 A3.

**SOURCE**

Plk 3-kinase p110α (4F3) is a mouse monoclonal antibody raised against recombinant protein fragment corresponding to Plk 3-kinase p110α of human origin.

**PRODUCT**

Each vial contains 100 µg IgG, kappa light chain in 1.0 ml of PBS with <0.1% sodium azide and 0.1% gelatin.

**APPLICATIONS**

Plk 3-kinase p110α (4F3) is recommended for detection of Plk 3-kinase p110α of mouse, rat, and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500), flow cytometry (1 µg per 1 x 10^6 cells) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).


Molecular Weight of Plk 3-kinase p110α: 110 kDa.

Positive Controls: Jurkat whole cell lysate: sc-2204, A-431 whole cell lysate: sc-2201 or C2C12 whole cell lysate: sc-364188.

**STORAGE**

Store at 4°C, **DO NOT FREEZE**. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

**DATA**

**SELECT PRODUCT CITATIONS**


**RESEARCH USE**

For research use only, not for use in diagnostic procedures.