# PLC γ2 (phospho-Y753) polyclonal antibody

Catalog: BCP01345

Host:

Rabbit

Reactivity: Human, Rat

## **BackGround:**

Phosphoinositide-specific phospholipase C (PLC) plays a crucial role in the initiation of receptor mediated signal transduction through the generation of the two second messengers, inositol 1,4,5-triphosphate and diacylglycerol from phosphatidylinositol 4,5-bisphosphate. There are many mammalian PLC isozymes, including PLC B1, PLC  $\beta$ 2, PLC  $\beta$ 3, PLC  $\beta$ 4, PLC $\gamma$ 1, PLC $\gamma$ 2, PLC  $\delta$ 1, PLC  $\delta$ 2 and PLCe. PLCb exists as four different isoforms. PLC  $\delta 1$ , a calcium signal amplifier, is activated by an atypical GTP-binding protein. In addition, PLC  $\delta 1$  is an effector for GTP-binding protein transglutaminase II-mediated oxytocin receptor and a1B-adrenoreceptor signaling. Mouse PLC  $\delta 1$  is highly expressed in brain, heart, lung and testis. PLC  $\delta$  is abnormally accumulated in autopsied brains with Alzheimer's disease (AD), suggesting that it may play a role in the pathology of AD. PLC δ2 is markedly expressed in type II intestinal metaplasia and in the adenocarcinoma. When PLC 82 is expressed in type I intestinal metaplasia, the metaplasia is generally considered benignant, yet evolves toward neoplastic transformation. Thus, PLC  $\delta^2$  expression may be a possible marker of gastric malignant transformation.

#### **Product:**

Rabbit IgG, 1mg/ml in PBS with 0.02% sodium azide, 50% glycerol, pH7.2

**Molecular Weight:** 

~ 150 kDa

**Swiss-Prot:** 

P16885

**Purification&Purity:** 

The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen and the purity is > 95% (by SDS-PAGE).

**Applications:** 

WB: 1:500~1:1000

IHC: 1:50~1:200

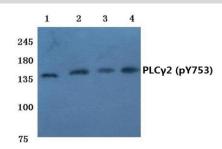
**Storage&Stability:** 

Store at 4 °C short term. Aliquot and store at -20 °C long

term. Avoid freeze-thaw cycles.

## **Specificity:**

p-PLC  $\gamma 2$  (Y753) polyclonal antibody detects endogenous levels of PLC  $\gamma 2$  protein when phosphorylated at Tyr753. **DATA:** 



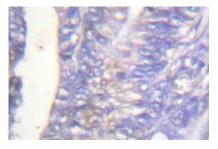
Western blot (WB) analysis of p-PLC  $\gamma$ 2 (Y753) pAb at 1:500 dilution Lane1:HEK293T whole cell lysate

Lane2:HEK293T treated with UV for 5 minutes then repair for 4 hours whole cell lysate

Lane3:HEK293T treated with UV for 5 minutes then repair for 6 hours whole cell lysate

Lane4:HEK293T treated with UV for 5 minutes then repair for 16 hours whole cell lysate

Lane5:HEK293T treated with UV for 5 minutes then repair for 24 hours whole cell lysate



Immunohistochemistry (IHC) analyzes of p-PLC  $\gamma$ 2 (Y753) pAb in paraffin-embedded human colon cancer tissue

#### Note:

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