6044 Cornerstone Court West, Suite E
San Diego, CA 92121
**Tel:** 1.858.829.3082
**Fax:** 1.858.481.8694
**Email:** info@bpsbioscience.com

# Data Sheet

## *p110α(H1047R)/p85α*

Human, recombinant, FLAG-tag
**Catalog #:** 40641
**Lot #:** 131101-G **Conc.:** 0.2 mg/ml

**Formulated in:** 25 mM Tris, pH 8.0, 69 mM NaCl, 1.35 mM KCl, 0.03% Tween-20, 3 mM DTT, and 50% glycerol.

**Stability:** >6 months at –80°C. *Avoid freeze/thaw cycles. Storing diluted enzyme is not recommended, if necessary, use carrier protein (BSA 0.1 – 0.5%).*

**References:**

1. Engelman, J.A., *et al. Nature Med.* **14:** 1351-1356 (2008)
2. Hafner, C., *et al., Proc. Natl. Acad. Sci. USA.* **104(33):**13450-13454 (2007)
3. Serra, V., *et al., Cancer Res.* **68(19):**8022-8030 (2008)

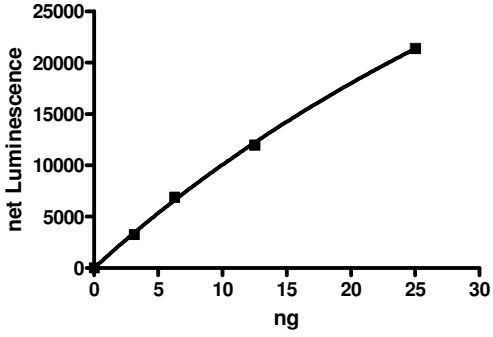
**Description:** Complex of N-terminal FLAG-tagged recombinant full-length human p110α (GenBank Accession No. U79143), with H1047R mutation, and recombinant full length, human p85α (no tag, GenBank Accession No. XM_043865). Co-expressed in Sf9 cells in a Baculovirus expression system. p110α(H1047R) MW=125 kDa, p85α MW=84 kDa.

**Specific Activity:** 1770 pmol/min/µg. Assay Conditions: 25 µl kinase reaction is conducted in 40 mM Tris-HCl (pH 7.5), 10 mM $MgCl_2$, 100 µM ATP, 200 µM of PI3K substrate (BPS Cat.# 40560) and the PI3K enzyme for 18 minutes at 30°C. Conversion of ATP to ADP is detected using ADP-Glo® Luminescent Kinase Assay reagents (Promega Corp., Madison, WI).

**Application:** Useful for the study of enzyme kinetics, screening inhibitors, and selectivity profiling.

## *Quality Assurance*

**Specific Activity**




**4-20% SDS-PAGE**
**Coomassie staining**

**Lane 1:**
4.4 µg p110α(H1047R)/p85α
**Lane 2:**
Protein Marker
**MW:**
p110α(H1047R):125 kDa
p85α: 84 kDa
**Purity:** ≥64%