6042 Cornerstone Court West, Suite B
San Diego, CA 92121
Tel: 1.858.202.1401
Fax: 1.858.481.8694
Email: info@bpsbioscience.com

Data Sheet

p110α(E545K)/p85α

Human, recombinant, Complex
Catalog #: 40640
Lot #: 120409 **Conc.:** 0.56 mg/ml

Formulated in: 25 mM Tris-HCl, pH 8.0, 69 mM NaCl, 1.35 mM KCl, 0.025% Tween-20, 50% Glycerol and 3 mM DTT

Stability: At least 6 months at –80°C. *Avoid freeze/thaw cycles.*

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 human p110α, also known as PIK3CA, GenBank Accession No. NM_006218, a.a. 2-1068(full length), with E545K mutation, with N-terminal FLAG-tag, MW=125 kDa, and human p85α, also known as PIK3R1, GenBank Accession No. NM_181523, a.a. 1-724(full length), MW=84 kDa. Coexpressed in a Baculovirus infected Sf9 cell expression system.

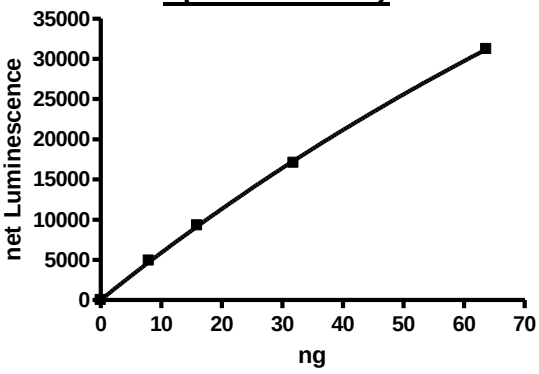
Specific Activity: 1,200 pmol/min/µg.

Assay Conditions: A unit of 110α(E545K)/p85α kinase activity is defined as the amount of enzyme required to produce 1 pmol of Phosphoinositol-3,4,5-Trisphosphate/min at 37°C. A 25 µl kinase reaction is conducted in 10 mM Tris-HCl (pH 7.5), 50 mM NaCl, 5 mM $MgCl_2$, 100 µM ATP, 10 µg mix of PS and Phosphoinositol-4,5-Bisphosphate, and 50 ng enzyme for 15 minutes at 30°C. Conversion of ATP to ADP is detected using PI3K ADP-Glo® Luminescent Kinase Assay (Promega Corp., Madison, WI).

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

Quality Assurance

Specific Activity



10% SDS-PAGE
Coomassie staining

Lane 1:
5.3 µg p110α(E545K)/p85α
Lane 2:
Protein Marker

MW:
p110α(E545K): 125 kDa
p85α: 84 kDa
Purity: ≥87%