

Echelon Biosciences Inc.

PI3-Kinase

Description:

PI3-Kinases are a family of enzymes involved in cellular functions such as cell growth, proliferation, differentiation, motility, survival and intracellular trafficking, which in turn are involved in cancer.

Echelon Biosciences' PI3-Kinase product line offers many assay platforms for the detection of PI3 Kinase activity. Refer to the table below to find the assay best fits your needs. See our website for other related products – enzymes, inhibitors, substrates, etc.

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	Class I PI3-Kinase Activity Assays			Class III PI3-K Activity Assay
Assay Format	ELISA	Fluorescence Polarization	AlphaScreen™	ELISA
Catalog Number	K-1000s	K-1100	K-1300	K-3000
No. of wells/kit	96	384	384	96
Application	Detects activity of purified or immunoprecipitated PI3-K enzyme or total PI3-K activity from cell lysates.	Detects activity of purified or immunoprecipitated PI3-K enzyme. PI3-K inhibitor screen.	Detects activity of purified or immunoprecipitated PI3-K enzyme. PI3K inhibitor screen.	Detects activity of purified or immunoprecipitated Class III PI3-K enzyme (Vps34).
Assay detection time	~ 3 hours	30 - 60 min	2 hours	2 - 2.5 hours
Detection range	0.22 - 18 pmol PI(3,4,5)P ₃ in 50 µL reaction or 100 µL detection volume	1.25 - 40 pmol PI(3,4,5)P ₃ in 10 µL reaction or 25 µL detection volume	0.011 - 25 pmol PI(3,4,5)P ₃ in 10 µL reaction or 25 µL detection volume	0.05 - 500 pmol PI(3)P in 50 µL reaction or 100 µL detection volume
Lower limit of Detection	2.2 nM PI(3,4,5)P ₃	50 nM PI(3,4,5)P ₃	0.5 nM PI(3,4,5)P ₃	5 nM PI(3)P
Features and Benefits	<ul style="list-style-type: none"> • Non-radioactive • Sensitive • Easy to use • Measured by standard plate readers 	<ul style="list-style-type: none"> • Non-radioactive • Quick, sensitive, homogeneous assay • Easy to use and stable over time • Can be automated 	<ul style="list-style-type: none"> • Non-radioactive, sensitive, homogeneous assay • Easy to use and stable over time • Can be automated • Requires the purchase of Alphascreen™ beads and 384-well white OptiPlate 	<ul style="list-style-type: none"> • Non-radioactive • Sensitive • Easy to use • Measured by standard plate readers
Assay Interference	Substances that strongly absorb around 450 nm	Cell lysate or substances that significantly alter the viscosity of the assay solution	Substances that absorb around 600 nm and singlet oxygen quenchers including: Azide > 0.001%; Fe ²⁺ , Fe ³⁺ , Cu ²⁺ , Ni ²⁺ >100 µM; SO ₄ ²⁻ > 0.5 mM	Substances that strongly absorb around 450 nm

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