Cell Assay Innovations

CARNA BIOSCIENCES

ClariCELL™ HER2 Kinase Assay Service

Description

The **ClariCELL™ HER2 Kinase Assay** quantifies autophosphorylation of human full-length HER2 in human cells. The assay is useful to determine potencies of small-molecule inhibitors against the specified kinase in the context of a cellular environment. Compound testing services are available utilizing the assay.

Overview

Human Embryonic Kidney (HEK 293) cells transiently expressing sequence verified human full-length HER2 are exposed to test compound or control, then lysed to release cellular proteins. HER2 is captured onto an assay plate, and the extent of autophosphorylation is quantified by ELISA using an antibody specific for the phosphorylation event. Cells expressing kinase deficient HER2 [K753M] are also utilized as controls to calculate the % inhibition of test compounds.

4-Step Assay Validation

HER2 Expression in Cells

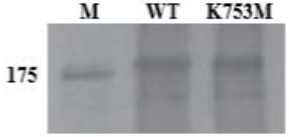

Figure 1: Wild type (wt) or kinase dead (K753M) HER2 was expressed transiently in 293 cells. Following cell lysis, an IP Western was performed with appropriate antibodies to capture and detect total HER2 protein.

HER2 Autophosphorylation in Cells

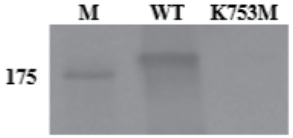

Figure 2: Wild type (wt) or kinase dead (K753M) HER2 was expressed transiently in 293 cells. Following cell lysis, an IP Western was performed with appropriate antibodies to capture and detect phospho-HER2 protein.

Quantification of Phosphorylation

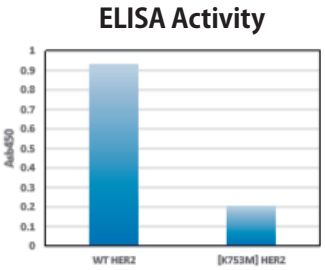

Figure 3: Wild type (wt) or kinase dead (K753M) HER2 was expressed transiently in 293 cells. Following cell lysis, an ELISA was performed to quantify the extent of autophosphorylation of HER2.

Reference Inhibitor Data

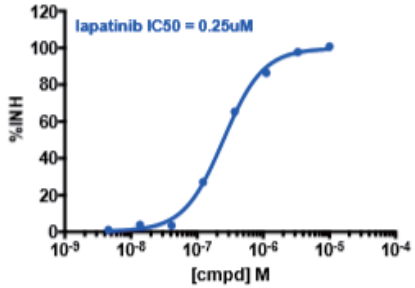

Figure 4: An autophosphorylation assay was performed in the presence of lapatinib, a HER2 inhibitor. Percent inhibition data were plotted to determine the IC50s.

サービスの詳細、最新情報はHPでご覧ください

カルナバイオサイエンス株式会社

〒650-0047　神戸市中央区港島南町1-5-5 BMA3F

TEL：078-302-7091（営業部直通）/ FAX：078-302-7086

E-mail：info@carnabio.com