



User's Manual

MultiplexPhosphoHiLA™ Human Phospho-IGF1 Receptor β (Tyr1135/1136 & Total) Detection Kit

REF PHILA-BY348

Σ 500T



RUO

This product is for research use only and is not intended for diagnostic use.

For illustrative purposes only. To perform the assay the instructions for use provided with the kit have to be used.

Creative Diagnostics

 Address: 45-1 Ramsey Road, Shirley, NY 11967, USA

 Tel: 1-631-624-4882 (USA) 44-161-818-6441 (Europe)  Fax: 1-631-938-8221

 Email: info@creative-diagnostics.com  Web: <https://reagents.creative-diagnostics.com>

PRODUCT INFORMATION

Intended Use

The phospho-IGF-1 Receptor β (Tyr1135-1136) + Total IGF-1 Receptor β assay kit is used to measure both the phosphorylation (on Tyr1135/1136) and total levels of endogenous IGF-1 Receptor β in cellular lysates. The assay is an ideal system for the screening of modulators of receptor activation (e.g. agonists and antagonists) as well as agents acting intracellularly, such as small molecule inhibitors of signal transduction. The assay will measure IGF-1 Receptor β phosphorylation by either recombinant or endogenous receptors, and can be applied to primary cells.

General Description

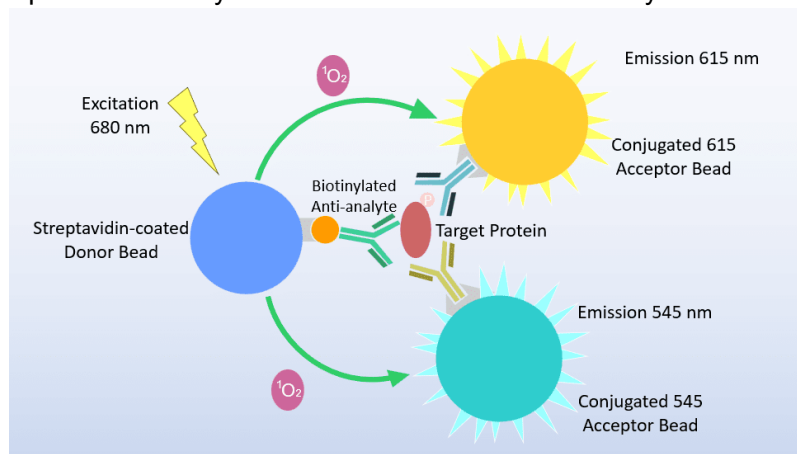
Phospho-IGF1R β (Tyr1135/1136) indicates kinase activation, while Total IGF1R β includes both unphosphorylated and phosphorylated forms. Total IGF1R β overexpression in esophageal cancer correlates with advanced stage and lymph node metastasis. Dual targeting of IGF1R and EGFR (e.g., xentuzumab + cetuximab) shows efficacy in IGF1R-driven tumors. The kits quantify total IGF1R β expression for patient stratification.

Principles of Testing

The MultiplexPhosphoHiLA™ assay kits allow for the rapid and sensitive detection of phosphorylated and total cellular proteins from the same protein. This MultiplexPhosphoHiLA™ measurement is carried out in the same assay plate well from a single sample of cell lysate and is achieved by the use of two types of Acceptor beads that emit at distinct wavelengths (545nm and 615nm).

The two distinct Acceptor beads report their binding to a distinct antigen through their association with specific assay antibodies, as indicated below.

The 615 Acceptor Bead is coated with the proprietary agent 1, which binds the tagged anti-phospho target antibody. The 545 Acceptor Bead is coated with the proprietary agent 2, which binds the tagged anti-total target protein antibody. The Donor Bead binds the biotinylated anti-total target protein antibody.



Reagents And Materials Provided

1. Lysis Buffer (5 \times), 1 \times 12 mL

2. Supplement (only in kits with Lysis Buffer B or C (5 \times)), 1 \times 1.5 mL
3. Activation Buffer, 1 \times 0.8 mL
4. Reaction Buffer 1 (Biotinylated anti-Total antibody), 1 \times 1.0 mL
5. Reaction Buffer 2 (tagged anti-phospho antibody), 1 \times 1.0 mL
6. Reaction Buffer 3 (tagged anti-Total antibody), 1 \times 1.0 mL
7. Dilution Buffer, 1 \times 3 mL
8. 615 Acceptor Beads (2mg/mL in PBS plus 0.03% Proclin-300), 1 \times 0.06 mL
9. 545 Acceptor Beads (2mg/mL in PBS plus 0.03% Proclin-300), 1 \times 0.06 mL
10. Streptavidin Donor Beads (2mg/mL in PBS plus 0.03% Proclin-300), 1 \times 0.06 mL
11. Positive Control Lysate, 1 \times Lyophilized tube

Storage

Unopened kit: Store at 4°C. DO NOT freeze the kit. The Reaction Buffer contains antibodies and freeze/thaw cycles can lead to a loss of activity.