

APB867Hu01 100µg

Active Epidermal Growth Factor Receptor 2 (EGFR2)

Organism Species: *Homo sapiens* (Human)

Instruction manual

FOR RESEARCH USE ONLY

NOT FOR USE IN CLINICAL DIAGNOSTIC PROCEDURES

1st Edition (Apr, 2016)

[PROPERTIES]

Source: Prokaryotic expression.

Host: *E. coli*

Residues: Phe376~Gly578

Tags: Two N-terminal Tags, His-tag and GST-tag

Purity: >95%

Endotoxin Level: <1.0EU per 1µg (determined by the LAL method).

Buffer Formulation: 20mM Tris, 150mM NaCl, pH8.0, containing 0.05% sarcosyl and 5% trehalose.

Applications: Cell culture; Activity Assays.

(May be suitable for use in other assays to be determined by the end user.)

Predicted isoelectric point: 5.9

Predicted Molecular Mass: 52.6kDa

Accurate Molecular Mass: 54kDa as determined by SDS-PAGE reducing conditions.

[USAGE]

Reconstitute in 20mM Tris, 150mM NaCl (pH8.0) to a concentration of 0.1-1.0 mg/mL. Do not vortex.

[STORAGE AND STABILITY]

Storage: Avoid repeated freeze/thaw cycles.

Store at 2-8°C for one month.

Aliquot and store at -80°C for 12 months.

Stability Test: The thermal stability is described by the loss rate. The loss rate was determined by accelerated thermal degradation test, that is, incubate the protein at 37°C for 48h, and no obvious degradation and precipitation were observed. The loss rate is less than 5% within the expiration date under appropriate storage condition.

[SEQUENCE]

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FLPES FDGPASNTA PLQPEQLQVF  
ETLEEITGYL YISAWPDSLP DLSVFQNLQV IRGRILHNGA YSLTLQGLGI  
SWLGLRSLRE LGSGLALIIH NTHLCFVHTV PWDQLFRNPH QALLHTANRP  
EDECVGEGLA CHQLCARGHC WPGPTQCVN CSQFLRGQEC VEECRVLQGL  
PREYVNARHC LPCHPECQPQ NGSVT CFG
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[ACTIVITY]

The epidermal growth factor receptor (EGFR; ErbB-1; HER1 in humans) is a transmembrane protein that is a receptor for members of the epidermal growth factor family (EGF family) of extracellular protein ligands. Epidermal growth factor receptor 2 (EGFR2) is a member of the epidermal growth factor (EGF) receptor family of receptor tyrosine kinases. The EGFR is essential for ductal development of the mammary glands, and agonists of the EGFR such as amphiregulin, TGF- α , and heregulin induce both ductal and lobuloalveolar development even in the absence of estrogen and progesterone. Besides, Actin Beta (ACTb) has been identified as an interactor of EGFR2, thus a binding ELISA assay was conducted to detect the interaction of recombinant human EGFR2 and recombinant human ACTb. Briefly, EGFR2 were diluted serially in PBS with 0.01% BSA (pH 7.4). Duplicate samples of 100uL were then transferred to ACTb-coated microtiter wells and incubated for 2h at 37°C. Wells were washed with PBST and incubated for 1h with anti-EGFR2 pAb, then aspirated and washed 3 times. After incubation with HRP labelled secondary antibody, wells were aspirated and washed 3 times. With the addition of substrate solution, wells were incubated 15-25 minutes at 37°C. Finally, add 50 μ L stop solution to the wells and read at 450nm immediately. The

binding activity of EGFR2 and ACTb was shown in Figure 1, and this effect was in a dose dependent manner.

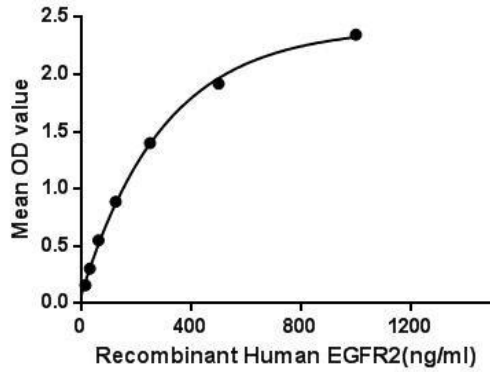


Figure 1. The binding activity of EGRF2 with ACTb.

[IDENTIFICATION]

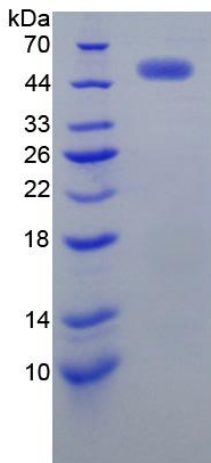


Figure 2. SDS-PAGE

Sample: Active recombinant EGFR2, Human

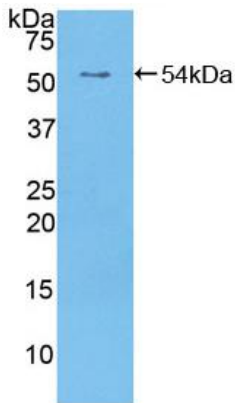


Figure 3. Western Blot

Sample: Recombinant EGFR2, Human;

Antibody: Rabbit Anti-Human EGFR2 Ab (PAB867Hu01)

[IMPORTANT NOTE]

The kit is designed for in vitro and research use only, we will not be responsible for any issue if the kit was used in clinical diagnostic or any other procedures.