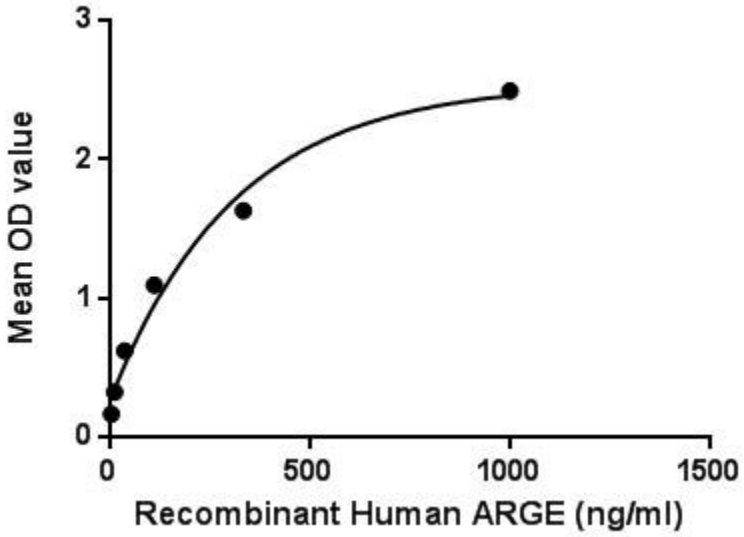
Active Amphiregulin (AREG) Instruction Manual

SBPA004Hu01

Homo sapiens (Human)

Buffer Formulation	PBS, pH7.4, containing 0.01% SKL, 1mM DTT, 5% Trehalose and Proclin300.
Traits	Freeze-dried powder
Purity	> 90%
Isoelectric Point	5.1
Applications	Cell culture; Activity Assays.

ACTIVITY TEST



Amphiregulin, also known as AREG, is an autocrine growth factor as well as a mitogen for astrocytes, Schwann cells, fibroblasts. It is related to epidermal growth factor (EGF) and transforming growth factor alpha (TGF-alpha). This protein interacts with the Epidermal growth factor receptor (EGFR) to promote the growth of normal epithelial cells. Besides, Epidermal Growth Factor Receptor (EGFR) has been identified as an interactor of ARGE, thus a binding ELISA assay was conducted to detect the interaction of recombinant human ARGE and recombinant human EGFR. Briefly, ARGE were diluted serially in PBS, with 0.01% BSA (pH 7.4). Duplicate samples of 100uL were then transferred to EGFR-coated microtiter wells and incubated for 2h at 37℃. Wells were washed with PBST and incubated for 1h with anti-ARGE 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℃. Finally, add 50μL stop solution to the wells and read at 450nm immediately. The binding activity of ARGE and EGFR was shown in Figure 1, and this effect was in a dose dependent manner.
Figure. The binding activity of ARGE with EGFR.

USAGE

Reconstitute in 10mM PBS (pH7.4) to a concentration of 0.1-1.0 mg/mL. Do not vortex.

STORAGE

Avoid repeated freeze/thaw cycles. Store at 2-8°C for one month. Aliquot and store at -80°C for 12 months.

STABILITY

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.

Image

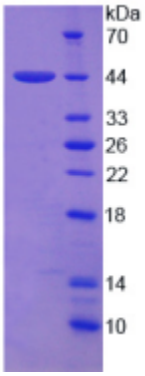


Figure. SDS-PAGE

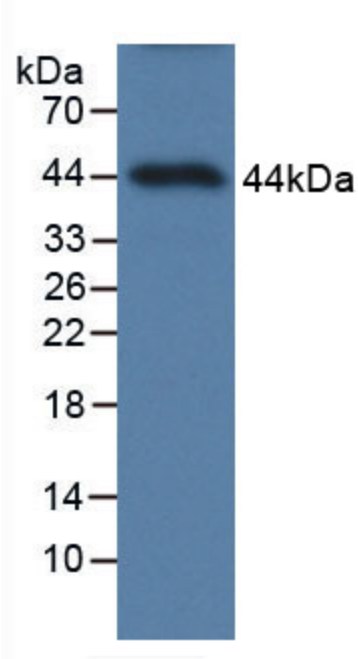


Figure. Western Blot

[IMPORTANT NOTE]

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