

## Active Recombinant Human AREG protein, His-GST-tagged

**Cat. No.** AREG-516H    **Lot. No.** (See product label)

### SPECIFICATION

|                         |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
|-------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Product Overview</b> | Active Recombinant Human AREG protein(P15514)(20~100 aa), fused with N-terminal His tag and GST tag, was expressed in E.coli.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| <b>Species</b>          | Human                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| <b>Source</b>           | E.coli                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| <b>ProteinLength</b>    | 20-100 aa                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| <b>Form</b>             | Lyophilized from sterile PBS, pH7.4, containing 0.01% SKL, 1mM DTT, 5% Trehalose and Proclin300.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| <b>Bio-activity</b>     | <p>Amphiregulin (AREG) is a well-characterized member of the epidermal growth factor (EGF) family and is one of the ligands of the EGF receptor (EGFR). AREG plays a key role in mammalian development and in the control of branching morphogenesis in various organs. Furthermore, AREG participates in a wide range of physiological and pathological processes activating the major intracellular signalling cascades governing cell survival, proliferation and motility. Besides, EGF has been identified as an interactor of AREG, thus a functional binding ELISA assay was conducted to detect the interaction of recombinant human AREG and recombinant rat EGF. Briefly, AREG was diluted serially in PBS with 0.01% BSA (pH 7.4). Duplicate samples of 100 µl were then transferred to EGF-coated microtiter wells and incubated for 1h at 37°C. Wells were washed with PBST and incubated for 1h with anti-AREG pAb, then aspirated and washed 3 times. After incubation with HRP labelled secondary antibody</p> |

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for 1h at 37°C, wells were aspirated and washed 5 times. With the addition of substrate solution, wells were incubated 15-25 minutes at 37°C. Finally, add 50  $\mu$  stop solution to the wells and read at 450/630 nm immediately. The binding activity of recombinant human AREG and recombinant rat EGF was shown, the EC50 for this effect is 0.1 ug/mL.

|                       |                                                                                                            |
|-----------------------|------------------------------------------------------------------------------------------------------------|
| <b>Molecular Mass</b> | 38.6kDa                                                                                                    |
| <b>Endotoxin</b>      | <1.0EU per 1 $\mu$ g (determined by the LAL method).                                                       |
| <b>Purity</b>         | > 90% as determined by SDS-PAGE.                                                                           |
| <b>Storage</b>        | Avoid repeated freeze/thaw cycles. Store at -20°C for 12 months. Aliquot and store at -80°C for 12 months. |
| <b>Reconstitution</b> | Reconstitute in 10mM PBS (pH7.4) to a concentration of 0.1-1.0 mg/mL. Do not vortex.                       |

## GENE INFORMATION

|                        |                                                                                                                                                                        |
|------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Gene Name</b>       | AREG amphiregulin [ Homo sapiens ]                                                                                                                                     |
| <b>Official Symbol</b> | AREG                                                                                                                                                                   |
| <b>Synonyms</b>        | AREG; amphiregulin; schwannoma derived growth factor, SDGF; schwannoma-derived growth factor; colorectum cell-derived growth factor; AR; SDGF; AREGB; CRDGF; MGC13647; |
| <b>Gene ID</b>         | 374                                                                                                                                                                    |
| <b>mRNA Refseq</b>     | NM_001657                                                                                                                                                              |

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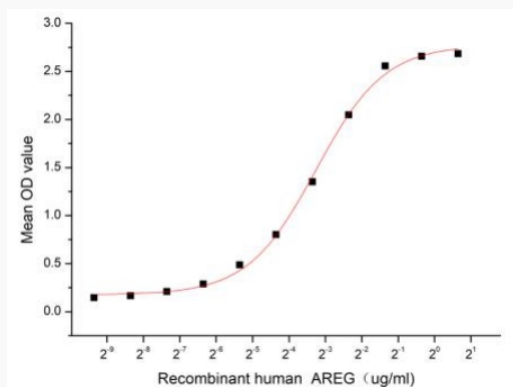
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**Protein Refseq** NP\_001648

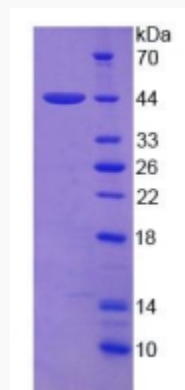
**MIM** 104640

**UniProt ID** P15514

### Activity



### SDS-PAGE



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