Active Recombinant Human AREG protein, His-GST-tagged

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

SPECIFICATION

Product Overview	Active Recombinant Human AREG protein(P15514)(20~100 aa), fused with N-terminal His tag and GST tag, was expressed in E.coli.
Species	Human
Source	E.coli
ProteinLength	20-100 aa
Form	Lyophilized from sterile PBS, pH7.4, containing 0.01% SKL, 1mM DTT, 5% Trehalose and Proclin300.
Bio-activity	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

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

GENE INFORMATION

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

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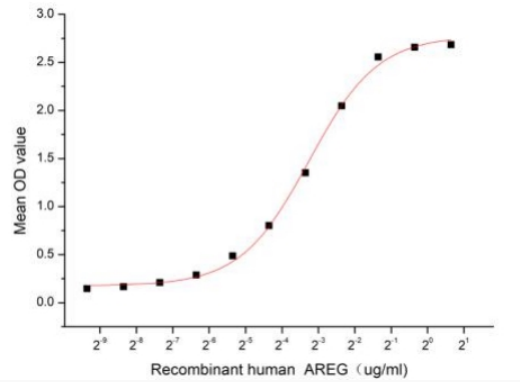
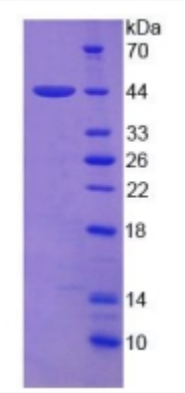
Protein Refseq	NP_001648
MIM	104640
UniProt ID	P15514
Activity	
SDS-PAGE	

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