

# Human EREG Protein, Ultra Low Endotoxin

Cat. No. ERE-HM201-UL

## Description

<b>Source</b>	Recombinant Human EREG Protein is expressed from HEK293 with hFc (IgG1) tag at the N-Terminus. It contains Val63-Leu108.
<b>Accession</b>	O14944
<b>Molecular Weight</b>	The protein has a predicted MW of 32.6 kDa. Due to glycosylation, the protein migrates to 37-42 kDa based on Bis-Tris PAGE result.
<b>Endotoxin</b>	Less than 0.01 EU per µg by the LAL method.
<b>Purity</b>	> 95% as determined by Bis-Tris PAGE > 95% as determined by HPLC

## Formulation and Storage

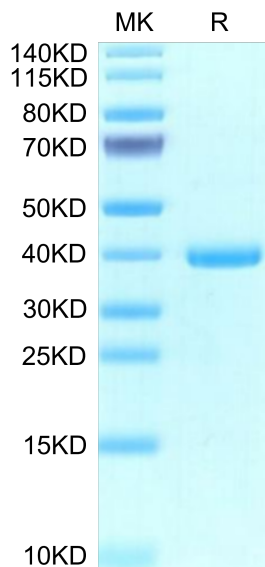
<b>Formulation</b>	Lyophilized from 0.22 µm filtered solution in PBS (pH 7.4). Normally 8% trehalose is added as protectant before lyophilization.
<b>Reconstitution</b>	Dissolve the lyophilized protein in distilled water. Please refer to the Certificate of Analysis for detailed instructions.
<b>Storage</b>	-20 to -80°C for 12 months as supplied from date of receipt. -80°C for 3 months after reconstitution. Recommend to aliquot the protein into smaller quantities for optimal storage. Please minimize freeze-thaw cycles.

## Background

Epidermal growth factor receptor (EGFR) regulates many crucial cellular programs, with seven different activating ligands shaping cell signaling in distinct ways. EGFR ligands epiregulin (EREG) and epigen (EPGN) stabilize different dimeric conformations of the EGFR extracellular region. As a consequence, EREG or EPGN induce less stable EGFR dimers than EGF-making them partial agonists of EGFR dimerization. Unexpectedly, this weakened dimerization elicits more sustained EGFR signaling than seen with EGF, provoking responses in breast cancer cells associated with differentiation rather than proliferation.

## Assay Data

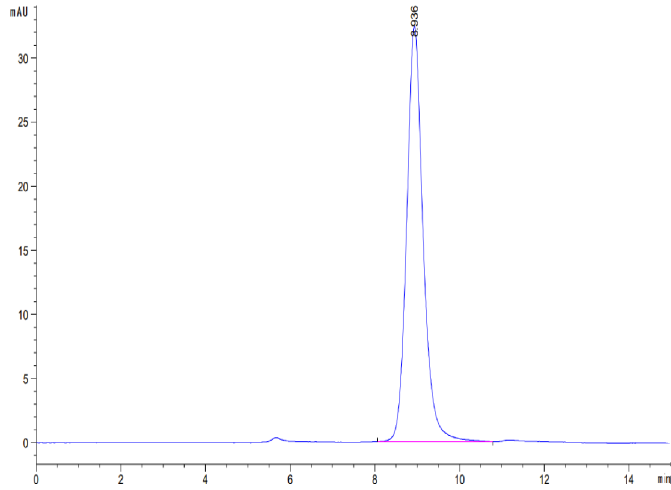
### Bis-Tris PAGE



Human EREG on Bis-Tris PAGE under reduced condition. The purity is greater than 95%.

### SEC-HPLC

Assay Data



The purity of Human EREG is greater than 95% as determined by SEC-HPLC.