

## Product datasheet for **SC308010**

### EGFR (NM\_201283) Human Untagged Clone

#### Product data:

|                           |  |
|---------------------------|--|
| Product Type:             | Expression Plasmids                          |
| Product Name:             | EGFR (NM_201283) Human Untagged Clone        |
| Tag:                      | Tag Free                                     |
| Symbol:                   | EGFR   |
| Synonyms:                 | ERBB; ERBB1; ERRP; HER1; mENA; NISBD2; PIG61 |
| Mammalian Cell Selection: | None   |
| Vector:                   | <u>pCMV6-XL4</u>                             |
| E. coli Selection:        | Ampicillin (100 ug/mL)                       |

**Fully Sequenced ORF:** >OriGene ORF sequence for NM\_201283 edited  
 ATGCGACCCTCCGGGACGGCCGGGGCAGCGCTCCTGGCGCTGGCTGCGCTCTGCCCC  
 GCGAGTCGGGCTCTGGAGAAAAGAAAGTTTGCCAAGGCACGAGTAACAAGCTCACGAG  
 TTGGGCACTTTTGAAGATCATTCTCAGCCTCCAGAGGATGTTCAATAACTGTGAGGTG  
 GTCCTTGGGAATTTGAAATTACCTATGTGCAGAGGAATTATGATCTTCTCTTAAAG  
 ACCATCCAGGAGGTGGTGGTTATGTCCTCATTGCCCTCAACACAGTGGAGCGAATTCCT  
 TTGAAAACCTGCAGATCATCAGAGGAAATATGTACTACGAAAATTCCTATGCCTTAGCA  
 GTCTTATCTAACTATGATGCAAATAAACCGGACTGAAGGAGTGCCCATGAGAAATTTA  
 CAGGAAATCCTGCATGGCGCCGTGCGGTTGAGCAACAACCCTGCCCTGTGCAACGTGGAG  
 AGCATCCAGTGGCGGGACATAGTCAGCAGTGACTTCTCAGCAACATGTCGATGGACTTC  
 CAGAACCACCTGGGCAGCTGCCAAAAGTGATCCAAGCTGTCCCAATGGGAGCTGCTGG  
 GGTGCAGGAGAGGAGAACTGCCAGAAAAGTACCAAAATCATCTGTGCCACGAGTGTCC  
 GGGCGCTGCCGTGGCAAGTCCCCAGTGACTGCTGCCACAACCAGTGTGCTGCAGGCTGC  
 ACAGGCCCCCGGGAGAGCGACTGCCTGGTCTGCCGCAAATTCGAGACGAAGCCACGTGC  
 AAGGACACCTGCCCCCACTCATGCTCTACAACCCACCACGTACCAGATGGATGTGAAC  
 CCCGAGGGCAAATACAGCTTTGGTGCCACCTGCGTGAAGAAGTGTCCCGTAATTATGTG  
 GTGACAGATCACGGCTCGTGCCTCCGAGCCTGTGGGGCCGACAGCTATGAGATGGAGGAA  
 GACGGCGTCCGCAAGTGAAGAAGTGCGAAGGGCCTTGCCGCAAAGTGTGAACGGAATA  
 GGTATTGGTGAATTTAAAGACTCACTCTCCATAAATGCTACGAATATTAACACTTCAA  
 AACTGCACCTCCATCAGTGGCGATCTCCACATCCTGCCGTGGCATTAGGGGTGACTCC  
 TTCACACATACTCCTCTGGATCCACAGGAACTGGATATTCTGAAAACCGTAAAGGAA  
 ATCACAGGTTTGAGCTGA

|                    |                |
|--------------------|----------------|
| Restriction Sites: | Please inquire |
| ACCN:              | NM_201283      |
| Insert Size:       | 1200 bp        |



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|                               |  |
|-------------------------------|--|
| <b>OTI Disclaimer:</b>        | <p>Due to the inherent nature of this plasmid, standard methods to replicate additional amounts of DNA in E. coli are highly likely to result in mutations and/or rearrangements. Therefore, OriGene does not guarantee the capability to replicate this plasmid DNA. Additional amounts of DNA can be purchased from OriGene with batch-specific, full-sequence verification at a reduced cost. Please contact our customer care team at <a href="mailto:custsupport@origene.com">custsupport@origene.com</a> or by calling 301.340.3188 option 3 for pricing and delivery.</p> <p>The molecular sequence of this clone aligns with the gene accession number as a point of reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own valid existence. This clone is substantially in agreement with the reference, but a complete review of all prevailing variants is recommended prior to use. <a href="#">More info</a></p> |
| <b>OTI Annotation:</b>        | <p>This clone has been fully sequenced and found to be a perfect match to the protein associated with this reference, NM_201283.1.</p>   |
| <b>Components:</b>            | <p>The ORF clone is ion-exchange column purified and shipped in a 2D barcoded Matrix tube containing 10ug of transfection-ready, dried plasmid DNA (reconstitute with 100 ul of water).</p>  |
| <b>Reconstitution Method:</b> | <ol style="list-style-type: none"><li>1. Centrifuge at 5,000xg for 5min.</li><li>2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.</li><li>3. Close the tube and incubate for 10 minutes at room temperature.</li><li>4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.</li><li>5. Store the suspended plasmid at -20°C. The DNA is stable for at least one year from date of shipping when stored at -20°C.</li></ol>  |
| <b>Note:</b>                  | <p>Plasmids are not sterile. For experiments where strict sterility is required, filtration with 0.22um filter is required.</p>  |
| <b>RefSeq:</b>                | <p><a href="#">NM_201283.1</a>, <a href="#">NP_958440.1</a></p>  |
| <b>RefSeq Size:</b>           | <p>1595 bp</p>   |
| <b>RefSeq ORF:</b>            | <p>1218 bp</p>   |
| <b>Locus ID:</b>              | <p>1956</p>  |
| <b>UniProt ID:</b>            | <p><a href="#">P00533</a></p>  |
| <b>Cytogenetics:</b>          | <p>7p11.2</p>  |
| <b>Protein Families:</b>      | <p>Adult stem cells, Cancer stem cells, Druggable Genome, ES Cell Differentiation/IPS, Protein Kinase, Secreted Protein, Stem cell relevant signaling - JAK/STAT signaling pathway, Transmembrane</p>  |

**Protein Pathways:**

Adherens junction, Bladder cancer, Calcium signaling pathway, Colorectal cancer, Cytokine-cytokine receptor interaction, Dorso-ventral axis formation, Endocytosis, Endometrial cancer, Epithelial cell signaling in Helicobacter pylori infection, ErbB signaling pathway, Focal adhesion, Gap junction, Glioma, GnRH signaling pathway, MAPK signaling pathway, Melanoma, Non-small cell lung cancer, Pancreatic cancer, Pathways in cancer, Prostate cancer, Regulation of actin cytoskeleton

**Gene Summary:**

The protein encoded by this gene is a transmembrane glycoprotein that is a member of the protein kinase superfamily. This protein is a receptor for members of the epidermal growth factor family. EGFR is a cell surface protein that binds to epidermal growth factor, thus inducing receptor dimerization and tyrosine autophosphorylation leading to cell proliferation. Mutations in this gene are associated with lung cancer. EGFR is a component of the cytokine storm which contributes to a severe form of Coronavirus Disease 2019 (COVID-19) resulting from infection with severe acute respiratory syndrome coronavirus-2 (SARS-CoV-2). [provided by RefSeq, Jul 2020]

Transcript Variant: This variant (3, also known as ErbB1-S) uses a different 3' terminal exon when compared to variant 1. The resulting isoform (c) has a shorter and distinct C-terminus. Only the extracellular domain is present in isoform c.