

## Insulin Like Growth Factor 2 (IGF2) Active Protein | IGF2 active protein

Active Insulin Like Growth Factor 2 (IGF2)

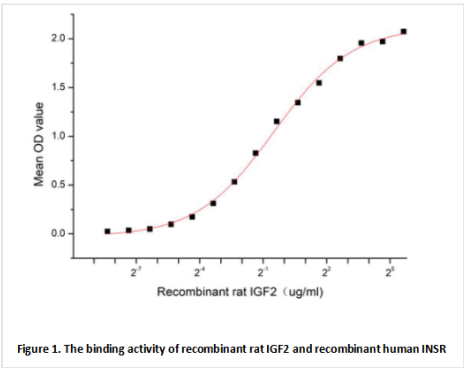
|                               |                       |                                                     |
|-------------------------------|-----------------------|-----------------------------------------------------|
| CATALOG #<br><b>AAA161672</b> | HOST<br><b>E Coli</b> | APPLICATIONS<br><b>Activity Assay, Cell Culture</b> |
|-------------------------------|-----------------------|-----------------------------------------------------|

### PRODUCT SYNONYMS

Insulin Like Growth Factor 2 (IGF2); Active Insulin Like Growth Factor 2 (IGF2); Insulin Like Growth Factor 2; INSIGF; IGF-II; Somatomedin A; Preptin; Insulin-like growth factor II Ala-25 Del4; IGF2 active protein

### PRODUCT SPECIFICATIONS

|                                                 |                                                                                              |
|-------------------------------------------------|----------------------------------------------------------------------------------------------|
| Host                                            | E Coli                                                                                       |
| Purity/Purification                             | Greater than 97% by SDS-PAGE                                                                 |
| Form/Format                                     | Freeze-dried powder; PBS, pH7.4, containing 0.01% SKL, 1mM DTT, 5% Trehalose and Proclin300. |
| Sequence                                        | Ala25~Glu9 1                                                                                 |
| Applicable Applications for IGF2 active protein | Activity Assay, Cell Culture                                                                 |
| Species                                         | Rat                                                                                          |
| Expression System                               | Prokaryotic expression                                                                       |
| Tag                                             | N-terminal His Tag                                                                           |
| Endotoxin Level                                 | <1.0EU per 1ug (determined by the LAL method)                                                |
| Isoelectric Point                               | 7.7                                                                                          |
| Research Area                                   | Tumor immunity, Endocrinology                                                                |
| Preparation and Storage                         | Store at 2-8 degree C for one month, -80 degree C for 12 months                              |

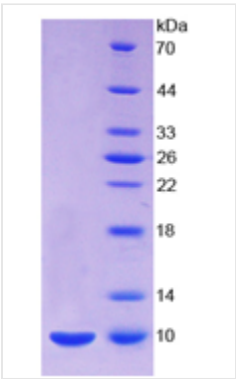


Bioactivity

Insulin-like growth factor 2 (IGF2) is one of three protein hormones that share structural similarity to insulin. It has growth-regulating, insulin-like and mitogenic activities.IGF2 exerts its effects by binding to the IGF-1 receptor and to the short isoform of the insulin receptor. IGF2 may also bind to the IGF2 receptor (also called the cation-independent mannose 6-phosphate receptor), which acts as a signalling antagonist; that is, to prevent IGF2 responses. Besides, Insulin Receptor (INSR) has been identified as an interactor of IGF2, thus a functional binding ELISA assay was conducted to detect the interaction of recombinant rat IGF2 and recombinant human INSR. Briefly, IGF2 were diluted serially in PBS, with 0.01% BSA (pH 7.4). Duplicate samples of 100 ul were then transferred to INSR-coated microtiter wells and incubated for 2h at 37 degree C. Wells were washed with PBST and incubated for 1h with anti-IGF2 pAb, then aspirated and washed 3 times. After incubation with HRP labelled secondary antibody, wells were aspirated and washed 5 times. With the addition of substrate solution, wells were incubated 15-25 minutes at 37 degree C. Finally, add 50uL stop solution to the wells and read at 450 nm immediately. The binding activity of recombinant rat IGF2 and recombinant human INSR was shown in Figure 1, the EC50 for this effect is 0.71 ug/mL.

SDS-PAGE

Figure. SDS-PAGE



ADDITIONAL INFORMATION

|                                                   |                 |
|---------------------------------------------------|-----------------|
| Product Categories/Family for IGF2 active protein | Active proteins |
|---------------------------------------------------|-----------------|

NCBI AND UNIPROT INFORMATION

|                                  |                                                                                                                                                                                                                                                                 |
|----------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| NCBI GI #                        | 124258                                                                                                                                                                                                                                                          |
| NCBI GeneID                      | 24483                                                                                                                                                                                                                                                           |
| UniProt Accession #              | p01346; P01346                                                                                                                                                                                                                                                  |
| Molecular Weight                 | 20,086 Da                                                                                                                                                                                                                                                       |
| NCBI Official Full Name          | Insulin-like growth factor II                                                                                                                                                                                                                                   |
| NCBI Official Synonym Full Names | insulin-like growth factor 2                                                                                                                                                                                                                                    |
| NCBI Official Symbol             | Igf2                                                                                                                                                                                                                                                            |
| NCBI Official Synonym Symbols    | IGFII; RNIGF2                                                                                                                                                                                                                                                   |
| NCBI Protein Information         | insulin-like growth factor II; MSA; IGF-II; multiplication-stimulating activity; insulin-like growth factor II (IGF-II); multiplication-stimulating polypeptide; Insulin-like growth factor II (somatomedin A); insulin-like growth factor II isoform 2 variant |
| UniProt Protein Name             | Insulin-like growth factor II                                                                                                                                                                                                                                   |
| UniProt Gene Name                | Igf2                                                                                                                                                                                                                                                            |
| UniProt Synonym Gene Names       | Igf-2; IGF-II; MSA                                                                                                                                                                                                                                              |
| UniProt Entry Name               | IGF2_RAT                                                                                                                                                                                                                                                        |

**For Research Use Only.** Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.

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Online datasheet: <https://stage.aaabiotech.com/e-coli-active-protein/insulin-like-growth-factor-2-igf2/161672>