

**Datasheet for KOA0292****Human PLGF ELISA Kit****Overview**

|                      |                                           |
|----------------------|-------------------------------------------|
| <b>Description:</b>  | Human PLGF AccuSignal ELISA Kit - KOA0292 |
| <b>Item No.:</b>     | KOA0292                                   |
| <b>Size:</b>         | 1 Kit                                     |
| <b>Applications:</b> | ELISA                                     |
| <b>Reactivity:</b>   | Human                                     |
| <b>Range:</b>        | 15.6 pg/ml - 1000 pg/ml                   |

**Product Details**

|                            |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
|----------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Background:</b>         | The protein, also called PGF, is 149 amino acids long and shares 53% identity with the platelet-derived growth factor-like region of human VPF. And the N-glycosylated PLGF protein is secreted into the medium and that it functions as a dimer <sup>1</sup> . The PLGF gene is mapped to 14q24-q31. There are 3 isoforms of PGF, designated PGF1, PGF2, and PGF3. Only PGF2 is able to bind heparin. Additionally, PGF regulates inter- and intramolecular cross-talk between the VEGF receptor tyrosine kinases FLT1 and FLK12. It also can stimulate angiogenesis and collateral growth in ischemic heart and limb with at least a comparable efficiency to VEGF3. |
| <b>Synonyms:</b>           | AI854365, D12S1900, MGC93298, Pgf, PGFL, PIGF, Placenta growth factor, Placental growth factor, Placental growth factor vascular endothelial growth factor related protein, PLGF, PLGF 2, PLGF_HUMAN, PIGF2, SHGC 10760, Vascular endothelial growth factor related protein                                                                                                                                                                                                                                                                                                                                                                                            |
| <b>Detection Kit Type:</b> | ELISA Kit                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| <b>Detection Range:</b>    | 15.6 pg/ml - 1000 pg/ml                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| <b>Sensitivity:</b>        | <1 pg/ml                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |

**Target Details**

|                            |                                                                                                           |
|----------------------------|-----------------------------------------------------------------------------------------------------------|
| <b>Gene Name:</b>          | PGF                                                                                                       |
| <b>Reactivity:</b>         | Human                                                                                                     |
| <b>Immunogen:</b>          | Expression system for standard: E.coli; Immunogen sequence: A21-R149                                      |
| <b>Purity/Specificity:</b> | Natural and recombinant human PLGF. There is no detectable cross-reactivity with other relevant proteins. |

**Relevant Links:**

- [UniProtKB - P49763](#)
- [NCBI - NP\\_001193941.1](#)
- [GeneID - 5228](#)
- [KOA0292 Protocol](#)

## Application Details

|                             |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
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| <b>Tested Applications:</b> | ELISA                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| <b>Application Note:</b>    | Useful in Sandwich ELISA for Quantitative Detection of Antigen. Aliquot 0.1ml per well of the 1000pg/ml, 500pg/ml, 250pg/ml, 125pg/ml, 62.5pg/ml, 31.2pg/ml, 15.6pg/ml human PLGF standard solutions into the precoated 96-well plate. Add 0.1ml of the sample diluent buffer into the control well (Zero well). Add 0.1ml of each properly diluted sample of human cell culture supernates, serum, plasma(heparin, EDTA, citrate) or urine to each empty well. It is recommended that each human PLGF standard solution and each sample be measured in duplicate. |
| <b>Assay Dilutions:</b>     | All assays should be optimized by the user. Recommended dilutions (if any) may be listed below.                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| <b>ELISA:</b>               | 15.6pg/ml-1000pg/ml                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| <b>Other:</b>               | DOE,<br>2-8° C - 02/14/20227<br>-20° C - 08/15/2027                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |

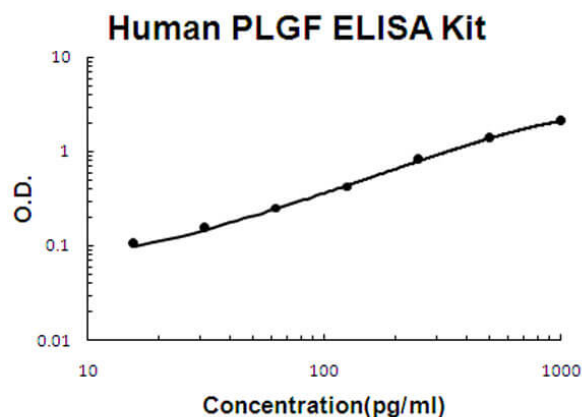
## Formulation

|                       |                |
|-----------------------|----------------|
| <b>Concentration:</b> | 1 Kit          |
| <b>Anticoagulant:</b> | Heparin Sodium |

## Shipping & Handling

|                            |                                                                                                                                                                                                                                                                                                                               |
|----------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Shipping Condition:</b> | Wet Ice                                                                                                                                                                                                                                                                                                                       |
| <b>Storage Condition:</b>  | Store vials at 4°C prior to opening. Centrifuge product if not completely clear after standing at room temperature. This product is stable for 6 months at 4°C as an undiluted liquid. Dilute only prior to immediate use. For extended storage freeze at -20°C or below for 12 months. Avoid cycles of freezing and thawing. |
| <b>Expiration:</b>         | See kit insert for complete instructions.                                                                                                                                                                                                                                                                                     |

## Images



### ELISA

Human PLGF AccuSignal ELISA Kit standard curve. Assay Range: 15.6pg/ml-1000pg/ml. Sensitivity: <1pg/ml.

## References

- Young RE et al. Investigating the impact of hypoxia and syncytialization on lipid nanoparticle-mediated mRNA delivery to placental cells. *Bioeng Transl Med.* (2026)

## Disclaimer

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