MedChemExpress

## Product Data Sheet

## PDGF R beta Protein, Human (HEK293, His)

| Cat. No.: | HY-P72494 |
| :--- | :--- |
| Synonyms: | Platelet-derived growth factor receptor beta; PDGF-R-beta; PDGFR-1; CD140b; PDGFRB |
| Species: | Human |
| Source: | HEK293 |
| Accession: | NP_002600.1 (L33-K531) |
| Gene ID: | 5159 |
| Molecular Weight: | $85-130 \mathrm{kDa}$ |

## PROPERTIES

## AA Sequence

## Biological Activity

Appearance

| Formulation | Lyophilized from a $0.2 \mu \mathrm{~m}$ filtered solution of $20 \mathrm{mM} \mathrm{PB}, 150 \mathrm{mM} \mathrm{NaCl}, \mathrm{pH} 7.2$. |
| :--- | :--- |
| Endotoxin Level | $<1 \mathrm{EU} / \mu \mathrm{g}$, determined by LAL method. |
| Reconsititution | It is not recommended to reconstitute to a concentration less than $100 ~ \mu \mathrm{~g} / \mathrm{mL}$ in ddH <br> recommended to add a carrier protein ( $0.1 \% \mathrm{BSA}, 5 \% \mathrm{HSA}, 10 \% \mathrm{FBS}$ or $5 \%$ Trehalose). |
| Storage \& Stability term storage it is | Stored at $-20^{\circ} \mathrm{C}$ for 2 years. After reconstitution, it is stable at $4^{\circ} \mathrm{C}$ for 1 week or $-20^{\circ} \mathrm{C}$ for longer (with carrier protein). It is <br> recommended to freeze aliquots at $-20^{\circ} \mathrm{C}$ or $-80^{\circ} \mathrm{C}$ for extended storage. |
| Shipping | Room temperature in continental US; may vary elsewhere. |

Measured by its binding ability in a functional ELISA. Immobilized PDGF-BB at $1 \mu \mathrm{~g} / \mathrm{mL}(100 \mu \mathrm{~L} / \mathrm{well})$ can bind Biotinylated PDGF R beta. The $E D_{50}$ for this effect is $42.19 \mathrm{ng} / \mathrm{mL}$.

Lyophilized powder

Lyophilized from a $0.2 \mu \mathrm{~m}$ filtered solution of $20 \mathrm{mM} \mathrm{PB}, 150 \mathrm{mM} \mathrm{NaCl}, \mathrm{pH} 7.2$.
<1 EU/ $\mu \mathrm{g}$, determined by LAL method.

It is not recommended to reconstitute to a concentration less than $100 \mu \mathrm{~g} / \mathrm{mL}$ in $\mathrm{ddH}_{2} \mathrm{O}$. For long term storage it is recommended to add a carrier protein ( $0.1 \% \mathrm{BSA}, 5 \% \mathrm{HSA}, 10 \%$ FBS or $5 \%$ Trehalose).

Stored at $-20^{\circ} \mathrm{C}$ for 2 years. After reconstitution, it is stable at $4^{\circ} \mathrm{C}$ for 1 week or $-20^{\circ} \mathrm{C}$ for longer (with carrier protein). It is Room temperature in continental US; may vary elsewhere.

| L V V T P P G P E L | V L N V S T F V L | T C S G S A P V V W | ERMSQEPPQE |
| :---: | :---: | :---: | :---: |
| M AKAQDGTFS | S V L T T NLTG | LDTGEYFCTH | NDSRGLETDE |
| R K R L Y I F V P D | P TVGFLPNDA | EELFIFLTEI | T E I T I PCRVT |
| D P Q V V T L E | K K G D V A L P V | Y D H Q R F S G I | FEDRSYICKT |
| T I G D R EV D S D | $A Y Y \vee Y R L Q V S$ | S I NVSVNAVQ | TVVRQGENIT |
| L M C I V I G N E V | V NFEWTYPRK | ES GRLVEPVT | D F L L D P Y H I |
| RSILHIPSAE | LEDSGTYTCN | V T ESVNDHQD | EKAINITVVE |
| S G Y V R L L G E V | G T L Q F A E L R | SRTLQVVFEA | Y P P P TVLWFK |
| D NRTLGDSSA | GEIALSTRNV | SETRYVSELT | LVRVKVAEAG |
| HYTMRAFHED | A EVQLSFQLQ | I N V P V R V L E L | S E S HPDSGEQ |
| TVRCRGRGMP | Q P N I I W S A C | D L K R C P E L P | P T L L G N S E E |
| E S Q L E N V T Y | WEEEQEFEVV | S T L R L Q HVDR | PLSVRCTLRN |
| A V G Q D T Q V I | V V P H S P F |  |  |

## DESCRIPTION

## Background

The PDGF R beta Protein encodes a cell surface tyrosine kinase receptor that interacts with members of the platelet-derived growth factor family, known mitogens for cells of mesenchymal origin. The identity of the growth factor binding to a receptor monomer determines whether the functional receptor forms a homodimer (with PDGFB or PDGFD) or a heterodimer (with PDGFA and PDGFB). Essential for normal cardiovascular system development and the rearrangement of the actin cytoskeleton, this gene is flanked on chromosome 5 by the genes for granulocyte-macrophage colony-stimulating factor and macrophage-colony stimulating factor receptor, with all three potentially implicated in the 5-q syndrome. A translocation between chromosomes 5 and 12, resulting in the fusion of this gene with that of the ETV6 gene, leads to chronic myeloproliferative disorder with eosinophilia. Broadly expressed, the PDGF R beta gene exhibits elevated levels in the gall bladder (RPKM 79.5), placenta (RPKM 61.0), and 21 other tissues, indicating its involvement in diverse physiological contexts across multiple organs.

## Caution: Product has not been fully validated for medical applications. For research use only.

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