

## PLGF-2, Human Recombinant

<b>Catalog No.</b>	CRP202-2 CRP202A CRP202-20	<b>Quantity:</b>	2 µg 5 µg 20 µg
<b>Description:</b>	<p>Human Placenta Growth Factor-2 (PLGF-2), a 22 kDa protein consisting of 152 amino acid residues is produced as a homodimer. PLGF is a polypeptide growth factor and a member of the platelet-derived growth factor family but more related to vascular endothelial growth factor (VEGF). PLGF acts only as a weak mitogen for those cell types possessing receptors for binding (e.g. vascular endothelial cells). At least one high-affinity receptor for PLGF (FLT -1 or VEGF-R1) has been demonstrated in different primary cell types(e.g. human umbilical vein endothelial cells and monocytes). In addition to its action as a weak mitogen it is also a chemoattractant for monocytes and endothelial cells. Two different proteins are generated by differential splicing of the human PLGF gene: PLGF-1 (131 aa native chain) and PLGF -2 (152 aa native chain). Both mitogens are secretable proteins, but PLGF-2 can bind to heparin with high affinity. PLGF is apparently a homodimer, but preparations of PLGF show some heterogeneity on SDS gels depending of the varying degrees of glycosylation. All dimeric forms posses similar biological activities. If PLGF is angiogenic <i>in vivo</i> is not clear. However, heterodimers between VEGF and PLGF are mitogenic for endothelial cells and have strong angiogenic activity <i>in vivo</i> (e.g. in the CAM assay or in the cornea pocket assay). Different cells and tissues (e.g. placenta) express PLGF-1 and PLGF-2 at different rates. A closely related protein of PLGF is VEGF with about 53% homology and VEGF-B with similar biological activities.</p>		
<b>Source:</b>	Insect cells		
<b>Molecular Weight:</b>	44 kDa		
<b>Formulation:</b>	Lyophilized from a solution containing BSA		
<b>Purity:</b>	80.0% as determined by RP-HPLC and SDS-PAGE analyses.		
<b>Endotoxin Level:</b>	< 0.1 ng per µg of PLGF-2.		
<b>Biological Activity:</b>	Measured by its ability to bind to immobilized recombinant human sFlt-1 in a functional ELISA. Recombinant human PIGF-2 can bind to immobilized recombinant human sFlt-1 (100 ng/well) with a linear range at 0.3 - 10 ng/ml.		
<b>Reconstitution:</b>	<b>Centrifuge vial prior to opening.</b> The lyophilized PIGF-2 is supplied in lyophilized form with carrier-protein (BSA) and can be reconstituted with 0.1 M acetic acid or PBS. This solution can be diluted into other buffered solutions or stored frozen for future use.		
<b>Storage &amp; Stability:</b>	The lyophilized human PLGF-2, though stable at room temperature for two weeks, is best stored in working aliquots at -20°C to -80°C. <b>Avoid repeated freeze-thaw cycles.</b>		

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