



# Rat VEGF-C (C152S)

5 µg

130-094-093

## Description:

Vascular endothelial growth factor C (VEGF-C), also known as Flt4 ligand, is a member of the VEGF growth factor family and is most closely related to VEGF-D. Rat VEGF-C is almost identical to mouse VEGF-C protein. Similar to VEGF-D, VEGF-C has a VEGF homology domain spanning the middle third of the precursor molecule and long N- and C-terminal pro-peptide extensions that are subject to stepwise proteolytic processing. Fully processed VEGF-C containing only the VEGF homology domain primarily forms non-covalently linked homodimers, which serve as ligands for both VEGF-R2/KDR and VEGF-R3/FLT-4. VEGF-C is mainly expressed in lymph nodes, heart, placenta, ovary, and small intestine. Besides its role as a lymphangiogenic factor mediated by the VEGF-R3 signalling pathway, VEGF-C seems also to have effects on physiological angiogenesis via its interaction with VEGF-R2.

Rat VEGF-C (C152S) comprises 129 amino acid residues with a Cys156Ser substitution and a C-terminal His-tag (6× His). VEGF-C (C152S) is a selective agonist of VEGF-R3 and does not bind to VEGF-R2, in contrast to wildtype VEGF-C. As a result of glycosylation, Rat VEGF-C migrates as an 18–24 kDa protein in SDS-PAGE under reducing conditions.

<b>Source:</b>	Insect cells
<b>Molecular mass:</b>	18–24 kDa
<b>Purity:</b>	>90% (SDS-PAGE)
<b>Endotoxin level:</b>	<0.1 ng/µg (1 EU/mg)
<b>Buffer:</b>	None
<b>Stabilizer:</b>	BSA
<b>Product format:</b>	Sterile filtered, lyophilized

## Biological activity:

The ED<sub>50</sub> of 150–300 ng/mL was determined by its ability to stimulate phosphorylation of the VEGF-R3/FLT-4 receptor in porcine aortic endothelial cells.

## Reconstitution:

Lyophilized VEGF-C (C152S) should be reconstituted in PBS or medium to a concentration of no less than 50 µg/mL. For long-term storage it is recommended to add a carrier protein (0.1% HSA or BSA).

## Storage:

Lyophilized Rat VEGF-C (C152S) should be stored at –20 °C. The expiration date is indicated on the vial label. Upon reconstitution, VEGF-C (C152S) should be stored in working aliquots at –20 °C. Avoid repeated freeze-thaw cycles.

All protocols and data sheets are available at [www.miltenyibiotec.com](http://www.miltenyibiotec.com).

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