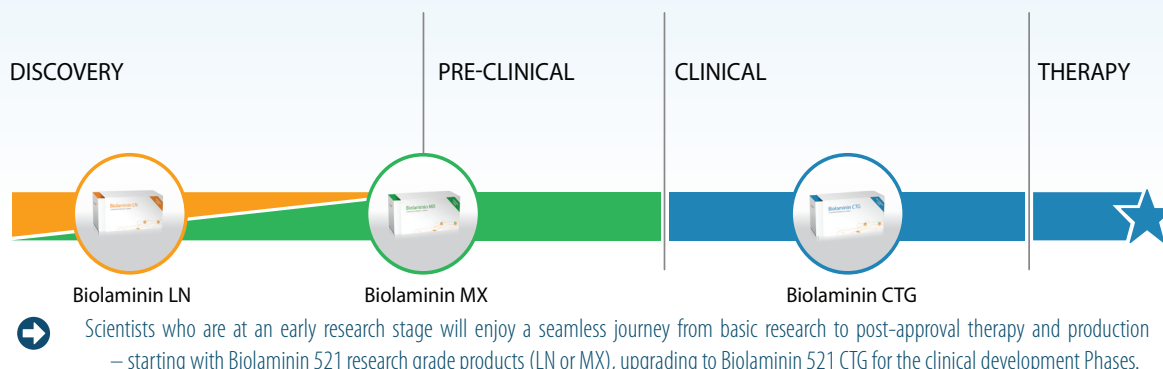


The Biolaminin™ 521 products are the only full-length, human, recombinant laminin 521 substrates on the market. Biolaminin 521 CTG is the world's first cell therapy grade laminin product and can support scientists throughout their cell therapy development process. This new product complements BioLamina's renowned original research grade laminin product, Biolaminin 521 LN (LN521). As a complement to the CTG product, Biolaminin 521 MX has been developed, facilitating a seamless transition from discovery into clinical settings.



	<b>Biolaminin 521 LN</b>	<b>Biolaminin 521 MX</b>	<b>Biolaminin 521 CTG</b>
<b>Product name</b>	Biolaminin 521 LN	Biolaminin 521 MX	Biolaminin 521 CTG
<b>Product code</b>	LN521	MX521	CT521
<b>Product claims</b>	Research grade	Research grade	Cell therapy grade
<b>Declaration</b>	For research use only	For research use only	For research use or non-commercial manufacturing of cell, gene, or tissue-based products
<b>Product specifications</b>	Human recombinant laminin 521. A trimeric protein of total 774 kDa (400 kDa, 196 kDa, 178 kDa, respectively).	Human recombinant laminin 521. A trimeric protein of total 774 kDa (400 kDa, 196 kDa, 178 kDa, respectively).	Human recombinant laminin 521. A trimeric protein of total 774 kDa (400 kDa, 196 kDa, 178 kDa, respectively).
<b>Manufacturing</b>	Human, adherent cell line	Human, suspension cell line	Human, suspension cell line
<b>Animal origin-free<sup>1)</sup></b>	Primary level*	Secondary level	Secondary level
<b>Quality control</b>	<ul style="list-style-type: none"> <li>• Appearance (clear colorless solution)</li> <li>• Concentration 0.10 mg/mL</li> <li>• Authenticity</li> <li>• Protein purity</li> <li>• Mycoplasma (PCR)</li> <li>• Endotoxin &lt;50 EU/mL (EndoLISA)</li> <li>• Potency</li> </ul>	<ul style="list-style-type: none"> <li>• Appearance (clear colorless solution)</li> <li>• Concentration 0.10 mg/mL</li> <li>• Authenticity</li> <li>• Protein purity</li> <li>• Mycoplasma (PCR)</li> <li>• Endotoxin &lt;10 EU/mL (EndoLISA)</li> <li>• Potency</li> </ul>	<ul style="list-style-type: none"> <li>• Appearance (clear colorless solution)</li> <li>• Concentration 0.10 mg/mL</li> <li>• Authenticity</li> <li>• Protein purity</li> <li>• Mycoplasma (qPCR)<sup>‡</sup></li> <li>• Endotoxin &lt;10 I.U./mL (LAL Kinetic)<sup>‡</sup></li> <li>• Potency</li> <li>• Retroviral RT activity (Q-PERT)<sup>‡</sup></li> <li>• Virus testing<sup>‡</sup></li> </ul>
<b>Documentation</b>	CoA & Animal Origin statement (AO)	CoA & Animal Origin Free statement (AOF)	<ul style="list-style-type: none"> <li>• CoA &amp; AOF statement</li> <li>• Extensive QC report (under CDA)</li> </ul>
<b>Formulation</b>	PBS buffered saline, 10% glycerol, 0.02% NaN <sub>3</sub> , pH 7.2	20mM HEPES, 0.25M NaCl, 10% glycerol, pH 7.5	20mM HEPES, 0.25M NaCl, 10% glycerol, pH 7.5
<b>Storage &amp; shipping</b>	Shipped on dry ice. Store at -20°C to -80°C	Shipped on dry ice. Store at -20°C to -80°C	Shipped on dry ice. Store at -20°C to -80°C

<sup>1)</sup> ISCT guidance document "ISCT Animal-Free Origin Survey Results-Summary"

\* FBS used in early seeding phase. Due to the dilution effect in the production process, the theoretical proportion of serum left in the final product is <0.2 PPM (parts/million). This value is calculated under the assumption that no serum is lost during the purification process, hence the actual concentration is likely to be considerably lower.

<sup>‡</sup> According to European and US Pharmacopoeia standards.