

Specification Sheet

HAMA Lyophilizate

Product description	Hyaluronic acid is naturally occurring in the human body and is vital for tissues such as skin, cartilage, bone, and nerves. HAMA is the methacrylated version of hyaluronic acid and is thereby photocurable in the presence of a photoinitiator. This lyophilized HAMA is easy to reconstitute in Reconstitution Agent P supplemented with a photoinitiator. The reconstituted HAMA can be used on its own or in bioink formulation for cell culture. For step-by-step instructions follow the <i>Reconstitution Protocol HAMA</i> .
Intended use	Biocompatible material for bioink formulation and 3D tissue constructs, Research Grade . For research use ONLY. Not intended for <i>in vitro</i> diagnostics and <i>in vivo</i> uses. Not intended for administration in humans or animals.
Product number	VLHA0000
Shelf life	Minimum 4 months, expiration date stated on package.
Storage and handling	Store at -20 to 4°C. Avoid temperature fluctuations. Protect from light.
Safety	Handle in accordance with good hygiene and laboratory safety practices. Read <i>Safety Data Sheet (SDS) HAMA Lyophilizate</i> for more information regarding ingredients and potential hazardous compounds.
Related documents	Reconstitution Protocol and Safety Data Sheet can be downloaded from our website at https://www.cellink.com/global/product/hama-lyophilizate/ . Scan the QR code below to reach it.



Property	Specification	Method
<i>Appearance</i>	White lyophilizate	Visual inspection.
<i>Sterility</i>	Sterile	Tested for the presence of bacteria, fungi and yeast.
<i>Degree of methacrylation</i>	15-25%	¹ H NMR performed at room temperature, acquired with a spectral width of 8013 Hz, or 16 ppm, averaged over 64 scans using 64K time domain points. Acrylate peaks present at 5.6 and 6.0, methyl at 1.8 ppm.
<i>Viscosity</i>	57±20 Pa·s	5% in PBS with 10 mM HEPES. Tested using rotational 20 mm plate-plate HR-2 TA Instruments Rheometer, assessed at 1 s ⁻¹ . Flow sweep parameters: shear rate from 0.002 s ⁻¹ to 100 s ⁻¹ , 25°C.
<i>pH</i>	6.5-7.4	5% in PBS with 10 mM HEPES. Assessed with pH paper.