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Specification Sheet

TissuePrint-HV

Product Description	TissuePrint-HV is a xeno-free fibrin-based bioink which supports multiple cell lines such as human induced pluripotent stem cells (HiPSCs), neural progenitor cells (NPCs), and mesenchymal stem cells (MSCs). For information on preparation and bioprinting, consult the TissuePrint-HV User Manual.	
Intended Use	Research Grade. Intended for research use only. Not intended for in vitro diagnostics or in vivo uses. Not intended for administration in humans or animals.	
Product Number	#######	
Shelf Life	Component shelf life indicated on package. Once mixed, use within 1 hour	
Shipping	Packages are shipped on dry ice in a styrofoam container in accordance to Transport Canada's regulations. If contents arrive damaged or thawed, contact info@axolotlbiosciences.com.	
Handling + Safety	Use in a well-ventilated area away from open flames. Wear PPE (gloves, lab coat, eye protection). Avoid inhalation or contact with skin. Dispose of all waste in accordance to local biohazardous waste protocols. Wipe spilled bioink and crosslinker with paper towel or Kimwipe and dispose in appropriate biohazardous waste containers. Sanitize the area with 70% ethanol after the spill is cleared.	
Storage	Upon arrival, store all components at -20°C or colder for up to one month. If printing with less than the packaged amount, thaw and aliquot/re-freeze as necessary to avoid multiple freeze thaw cycles. Once mixed, bioink should be used within 1 hour. The bioink slowly polymerizes and will exhibit a blue colour. Once mixed, crosslinker can be stored at 4°C and should be used within 7 days for best results. It may be necessary to pipette or stir the crosslinker to re-mix.	

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	Bioink	Crosslinker
Characteristics	Component 1-HV should be an opaque, red liquid, with a slightly viscous consistency.	Component A-HV should be a translucent, slightly viscous liquid with a slight amber colour.
	Component 2-HV should be a clear, colourless liquid.	Component B-HV should be a clear, colourless liquid.
	Component 3-HV should be a clear, colourless liquid.	Once prepared, the crosslinker should be a clear, colourless liquid and be a uniform consistency with little to no bubbles or clumps.
	Once prepared, the bioink should be slightly more viscous than water and be a uniform consistency with little to no bubbles or clumps. The solution should be opaque and red in colour.	
Sterility	Components are sterile filtered and tested for the presence of bacteria, fungi and yeast.	Components are sterile filtered and/or steam sterilized and tested for the presence of bacteria, fungi and yeast.
рН	7.4-7.6	7.4-7.6
Viscosity		
Cell Viability		

Related documentation such as Safety Data Sheets, Bioprinting User Manual, and protocols can be found at <u>https://axolotlbiosciences.com/resources</u>.

