



Holey Carbon Cryo-EM Grid, R2/1, Cu/Ni/Au Mesh

Catalog: GIG-2010

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PRODUCT INFORMATION

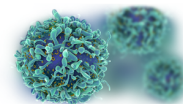
Product Name	Holey Carbon Cryo-EM Grid, R2/1, Cu/Ni/Au Mesh
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Product Overview	GIG holey carbon grids are lithographically precision-manufactured supports for cryo-electron microscopy (cryo-EM), featuring photolithographically defined circular holes on an ultra-thin amorphous carbon film (10–12 nm). Designed for single-particle analysis (SPA), electron tomography (ET), and micro-electron diffraction (MicroED), GIG grids deliver consistent hole geometry, minimal background scattering, and reliable sample vitrification across all four hole patterns (R1/1, R1.2/1.3, R2/1, R2/2). Available in copper, nickel, and gold mesh with 200, 300, and 400 mesh options. Trusted in peer-reviewed cryo-EM publications achieving resolutions from 2.7 Å to 3.9 Å (2011 to present).
Storage	Room temperature (sealed, dry); avoid humidity and light
Hole Diameter	2 µm



Hole Spacing	2 μm
Center Distance	3 μm
Hole Pattern Type	R2/1
Mesh Material	Cu; Ni; Au
Mesh Options	200/300/400
Grid Diameter	3.05 mm
Carbon Film Thickness	10–12 nm
Compatibility	Compatible with FEI/Thermo Fisher EPU, SerialEM, Legicon, cryoSPARC Live. Fits all standard cryo-EM autoloaders (Titan Krios, Glacios, Talos Arctica, JEOL CRYO ARM). Standard 3.05 mm grid diameter — drop-in replacement for commercial holey carbon grids.
Applications	Single-particle cryo-EM (SPA); electron tomography (ET); micro-electron diffraction (MicroED); structural biology of membrane proteins, protein complexes, ribosomes, viruses; high-resolution structure determination; automated high-throughput cryo-EM data collection.
Pack Size	50 grids/box; 100 grids/box

USAGE GUIDELINES

General Handling	Avoid excessive mixing or vortexing to prevent aggregation. Long-term storage above -80°C may result in aggregate formation. Thaw on ice before use.
Storage	Short term: $+2^{\circ}\text{C}$ to $+8^{\circ}\text{C}$ (up to 1 week) Long term: -80°C (stable for 12 months)
Stability	Stable for 12 months at -80°C . Avoid repeated freeze-thaw cycles.

**Freeze / Thaw**

Can be frozen, but limit to 3 freeze/thaw cycles to maintain particle integrity.

Important: This product is for **research use only**. Not intended for diagnostic or therapeutic applications. Please refer to the Safety Data Sheet (SDS) for complete handling and safety information.