IMMERSION OBJECTIVE

Microscope objective designed for use in cleared tissue sampling research including dual-view inverted Selective Plane Illumination Microscopy (diSPIM).

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OPTICAL SPECIFICATIONS		
Numerical Aperture	0.4 @ RI 1.45	0.37-0.43 over RI range
Immersion Media RI	1.33-1.56	Includes all major clearing solutions
Effective Focal Length	12 mm @ RI 1.45	15.3x-17.9x over RI range w/200 mm TL (not suitable for solvent-based reagents such as iDISCO)
Working Distance	12 mm (for all RI)	5.1 mm imaging depth with flat sample, 12 mm diameter sphere
Field of View	1.2 mm diameter	
Spherical Correction	480-1000 nm	Diffraction-limited for most media and $\boldsymbol{\lambda}$
Chromatic Correction	480-720 nm	Performance depends on media, optimized for CLARITY and TDE
Correction Collar	None	Designed for immersion without coverslip
Form Factor	Nikon Style	61.59 parfocal distance M25 threads

APPLICATIONS

- Dual-view cleared tissue imaging (diSPIM with cleared tissues)
- Single-view cleared tissue imaging (OpenSPIM setups for cleared tissues)
- Water-dipping applications with very long working distances



Resolution and Imaging Depth vs. NA (WD = 10mm, λ = 510nm)











