Application Note - High-NA chromatic and field corrected Endomicroscopic Imaging Objectives

The new generation of GRINTECH's color and field corrected high-NA MO-ACR objectives resolve cellular details in submicron resolution from center to the margin of the aperture

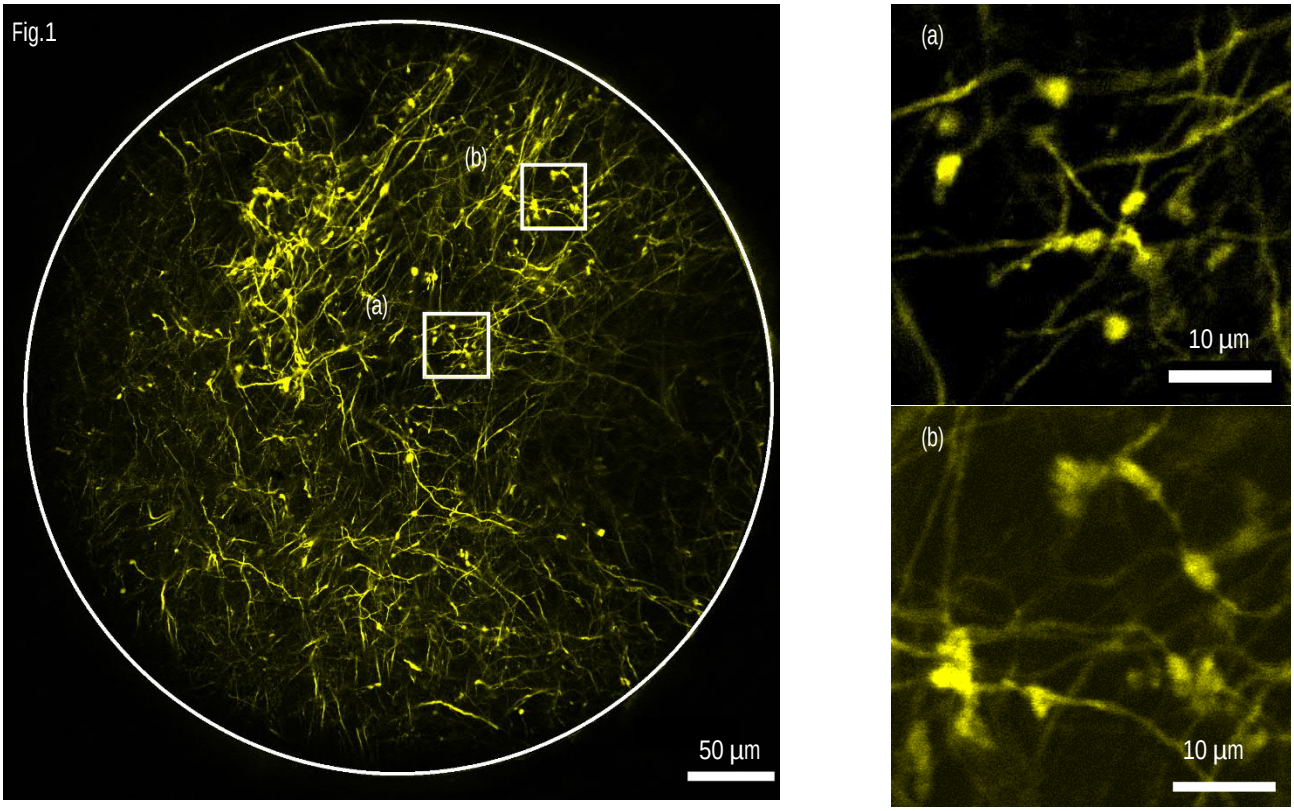

Fig.1: Mouse brain section, PFA fixation, cover glass 170 µm confocally imaged in fluorescence (exc. 488nm) with GT-MO-080-032-ACR-VISNIR-08CG-00 coupled to Olympus FV1000 with MO 10x; NA=0.4 with XYZ-Stage. White circle shows backside aperture of 1 mm corresponding to full object FOV of 450 µm, with optimal imaging quality in FOV of 360 µm. (a) and (b): 40 µm x 40 µm sections from the centre and edge of object FOV.

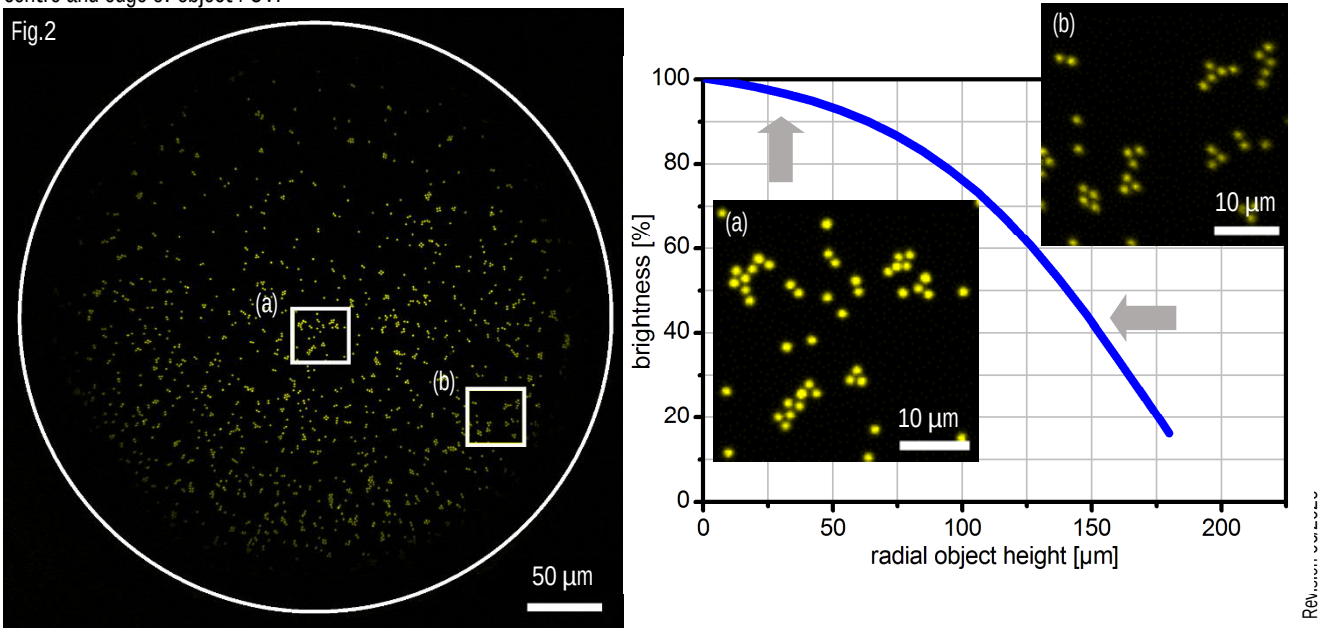

Fig.2: 2 µm fluorescence beads yellow/green acquired with GT-MO-080-032-ACR-VISNIR-08-00. Right: bead brightness depending on the radial object height. (a) and (b) 40 µm x 40 µm sections from the centre and edge of object FOV.

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The usable field of view is increased to 300 % in diameter compared to previous MO-080 objectives

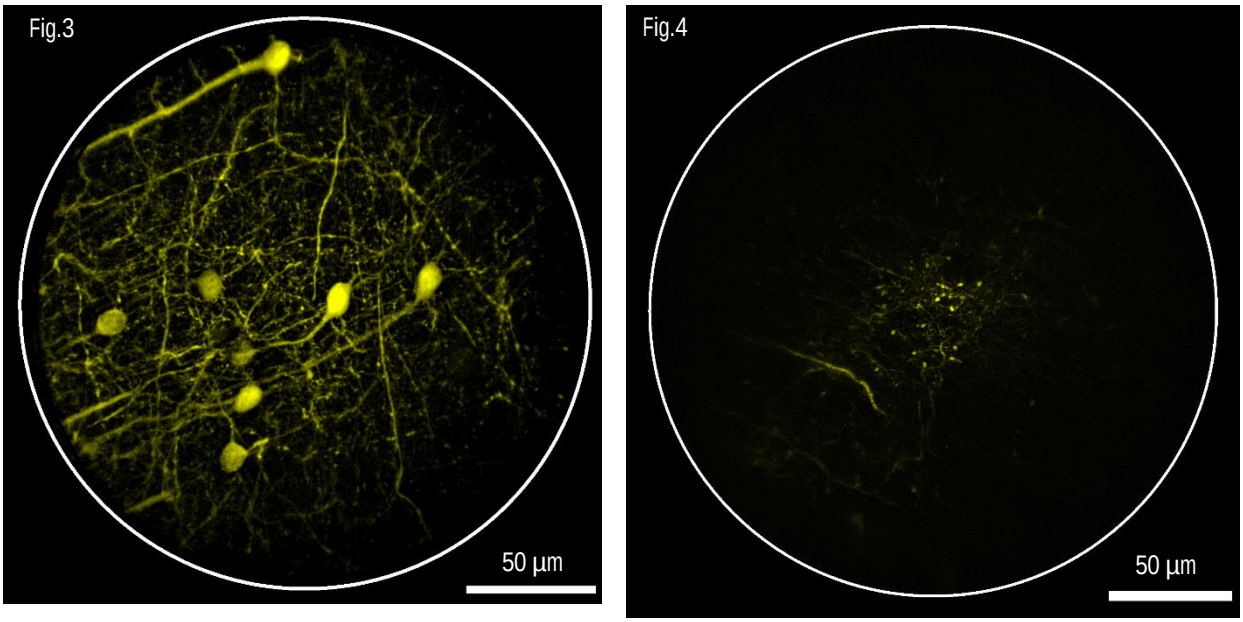

Fig.3: GT-MO-070-016-ACR-VISNIR-30-20 with full object FOV of 200 µm (optimal imaging in 150 µm) compared to Fig.4 GT-MO-080-018-AC900-450 with FOV of 65 µm

Now available in 1.3 mm outer diameter

For more details, please contact GRINTECH.

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