

## Objectives

The objectives described on the following page are specifically intended for laser microdissection. They are designed for high UV-light transmission upon laser cutting, and to provide the best image quality. The Leica SmartCut Series comprises the following objectives for LMD: UVI 6.3x and HCX PL FLUOTAR family (5x, 20x, 40x, 63x, and 150x). Improved optics provide high performance for laser microdissection of single cells as well as larger tissue areas. See Table 1 for a quick objective comparison.

**Table 1.** Leica Objectives for Laser Microdissection

*Please note that all objectives can be used in parallel for microdissection on the same LMD system.*

Order no.	Objective	Description
11506215	HCX PL FLUOTAR 1.25X/0.04	A "general" objective with the lowest magnification for, in most cases, overview of entire tissue sections and generation of overview images. It is used with diffusion plate for illumination of full view field.
11518146	UVI 5x/0.12 Microdissection	Low range magnification for cutting large areas
11518145	UVI 6.3X/0.13 Microdissection	Especially designed for laser microdissection with high UV-light transmission; perfectly suited for cutting larger areas e.g. for proteomics
11506505 (PH obj. 11506507)	HC PL FL 10x/0.30	Medium range magnification with acceptable cutting; frequently used in pathology for microdissection of big surfaces such as tumor areas; suitable for live cell cutting (LCC)
11506242 (PH obj. 11506243)	HC PL FL L 20x/0.40 XT CORR*	Preferred objective for live cell cutting (LCC); also frequently used in pathology
11506208 (PH obj. 11506209)	HC PL FL L 40x/0.60 XT CORR*	The standard objective, mostly used when dissecting single cells
11506222 (PH obj. 11506217)	HCX PL FL L 63x/0.70 XT CORR*	High range magnification for cutting single cells with higher precision
11506214	HCX PL FL 150x/0.90 Microdissection	dry objective, recommended for cutting of chromosomes spreads in combination with POL membrane slides; for microdissection only

\*L stands for long working distance which enables L objective to image through the glass slide.

CORR – correction of the lens is possible for optimal spherical aberration correction when working with glass slides, membrane slides or Petri dishes that have different thickness.

PH obj. - phase contrast objective.