BL-AC40TS

Description:

'BioLever mini' has a silicon probe of two layer structure. The probe on the probe support looks tetrahedral and the apex is further sharpened by an oxidation process. It shows higher aspect ratio than conventional pyramidal tips.

Outstanding features of BioLever mini:

1. Time saving in AFM data acquisition in liquid

High resonance at around 110 kHz in air and 25 kHz in water while its small spring constant of around 0.1 N/m. The high resonance cantilever is worth while scanning fast to shorten the data acquisition time and to make smooth and quick operation in magnifying a target area on the sample surface.

2. High resolution measurement in liquid

Sharpened silicon tips with its tip radius of 8 nm (typ.)

3. High sensitivity in Force curve measurement in liquid

The short cantilevers with its length of around 40 micro meters become advantageous for high sensitivity of optical beam deflection sensors in AFMs.
The small area lever responds quickly to shape change of bio-moleculars with short relaxation time.
Less noise in thermal vibration spectrum

4. Use in AFM systems combined with a fluorescent optical microscope

Silicon nitride cantilever, minimized its auto fluorescence, would not become an obstacle in fluorescent observation.

BL-AC40TS Specification

Frequency (kHz):	110.0
Max Frequency (kHz):	145.0
Min Frequency (kHz):	75.0
Spring Constant (N/m):	0.09
Max Spring Constant (N/m):	0.14
Min Spring Constant (N/m):	0.023
Tip Radius (nm):	8.0
Tip Height (nm):	7.0
Length, Width, Thickness (µm):	38 x 16 x 0.2
Tip Shape:	3 sided
Tip Material:	Silicon
Tip Coating:	None
Reflective Coating:	Cr/Au
Manufacturer:	Olympus