- Fixed concentration of radiolabeled ligand
- Measures of how well a compound competes with the radioligand
- Indicates that the studied molecule is utilizing the same binding pocket within the target protein









## Effect of a new drug on the production of specific interleukins







Biochemical binding events cause index of refraction changes, resulting in a wavelength shift



Dynamic mass redistribution (DMR) within a cell causes index of refraction changes, resulting in a wavelength shift







384-well formatHave a self reference pad within the sensorPre-activated amine coupling chemistry for covalent immobilization of targets





Target immobilization on EMA standard chemistry



Measures changes in index of refraction upon a binding event Change in index manifested by a shift in resonant wavelength (SPR) Sensitive to the first ~150 nm from the sensor surface





## Label-free captures information in a single cellular assay







## Label-free captures information in a single cellular assay



- non-invasive / live cell assay format
- produce better physiologically and biologically relevant data
- Conventional techniques will help to further investigate and deconvolute label-free responses



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9.45 - 11.30 Homogeneous assays for biomarker quantification and interaction studies Interaction studies based on "label-free" technology

**11.30 - 12.15** How to setup your Alpha assay

**14.00 - 18.00** Laboratory: biomarker quantification by

Alpha-technology

1 h incubation step: self-evaluation test



Mara Colzani, Application specialist - Discovery & Analytical solutions

EnSpire