



# The tools of tomorrow, when you need them today.

## EPIgeneous™ cellular assays for measuring epigenetic modifications

Directly measure methylation, demethylation, and total proteins on both adherent and suspension cells with EPIgeneous cell based assays from Revvity.

HTRF® assays for measuring epigenetic modifications provide you with the flexibility of choosing the assay that meets your research needs without compromising on sensitivity.

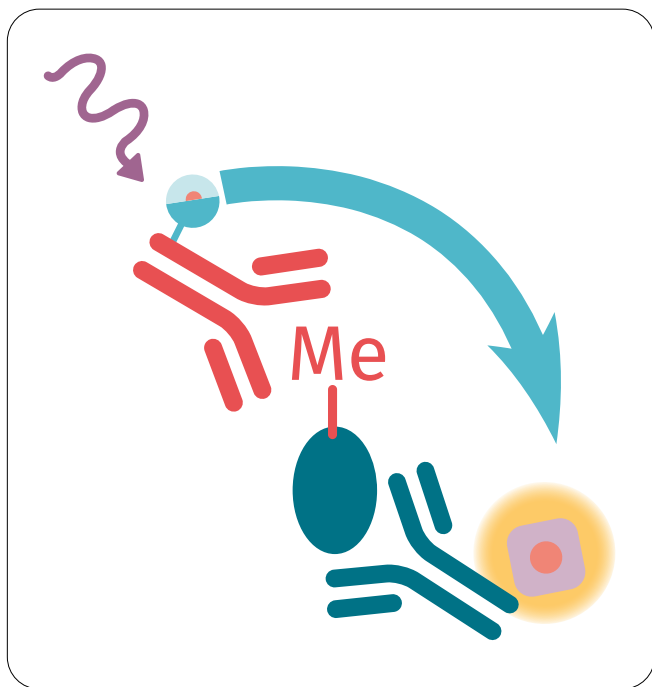
### Applications

- Quantification of histone 3 methylation
- Primary and secondary screening
- Cell based assays
- Inhibitor studies
- Phenotypic readout



## Features

- Complete kits with optimized assay procedures
- Compatibility with a wide range of cell lines - Ability to use suspension or adherent cells
- Optimized reagents for Total H3 for normalization studies
- Highly specific methylation detection
- Superior sensitivity
- Mix-and-read alternative to Western Blot



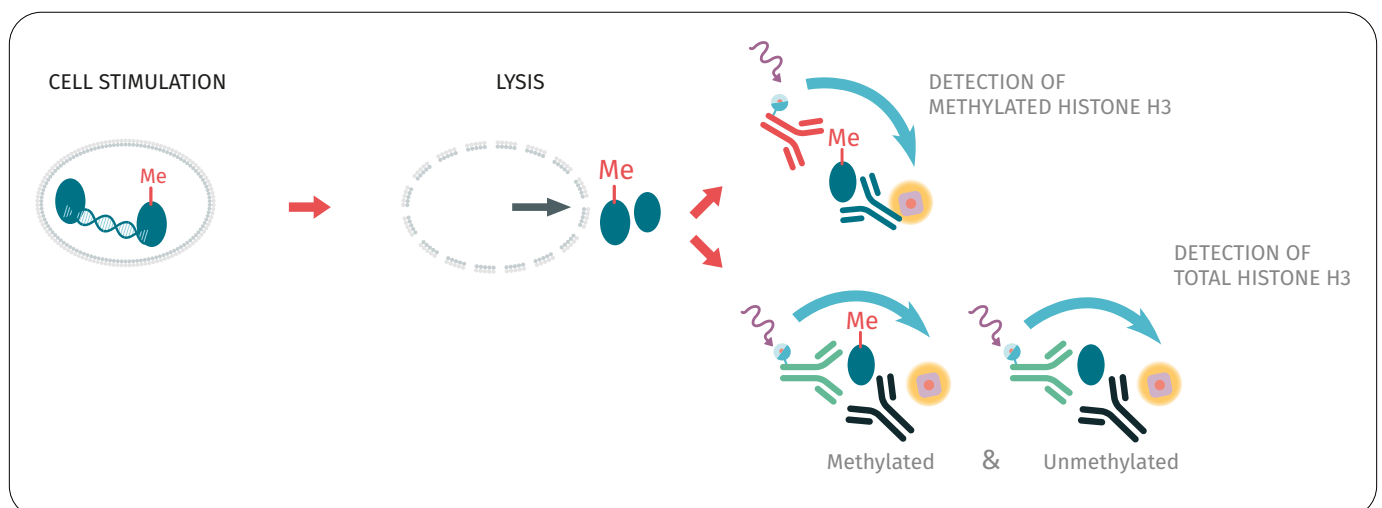
## Assay principle

The cell based sandwich assay directly detects endogenous levels of methylation in cells. The site specific methylation on histone H3 is detected using 2 different specific antibodies, one labeled with  $\text{Eu}^{3+}$  cryptate (donor) and the second with d2 (acceptor). The signal is proportional to the level of methylation.

## Simple, rapid and direct detection of histone 3 methylation

The methylation mark is detected in a sandwich assay format using 2 different specific antibodies, one labeled with  $\text{Eu}^{3+}$  cryptate (donor) and the second with d2 (acceptor). When the dyes are in close proximity, the excitation of the donor with a light source (laser or flash lamp) triggers a Fluorescence Resonance Energy Transfer (FRET) towards the acceptor, which in turn fluoresces at a specific wavelength (665 nm). One conjugate binds to Histone H3 and the other binds to the methyl mark generating FRET. The specific signal modulates positively in proportion to the methylation.

The assay is a two-plate assay protocol, where cells are plated, (stimulated) and lysed in the same culture plate and then transferred to the assay plate for the detection of methylation by HTRF reagents. This protocol allows the viability and confluence of the cells to be monitored. It can also be further streamlined to a one-plate assay protocol. Detection of methyl mark with HTRF® reagents is performed in a single plate used for plating, stimulation and detection. No washing steps are required. This protocol is designed for HTS, enabling miniaturization while maintaining HTRF quality.



Ordering information:		
Product	Tests	Part #
EPIgeneous H3K4Me2 Cellular Assay <b>NEW</b>	500	62KA2PAE
EPIgeneous H3K4Me2 Cellular Assay <b>NEW</b>	10,000	62KA2PAD
EPIgeneous H3K27Me3 Cellular Assay	500	62KC3PAE
EPIgeneous H3K27Me3 Cellular Assay	10,000	62KC3AD
EPIgeneous H3K36Me2 Cellular Assay	500	62KD2PAE
EPIgeneous H3K36Me2 Cellular Assay	10,000	62KD2PAD
EPIgeneous Total H3 Cellular Assay	500	62NH3PAE
EPIgeneous Total H3 Cellular Assay	10,000	62NH3PAD

## Interaction is everything

From the chemistry of our assays to the collaborative nature of our relationship with customers, Revvity is founded on the belief that “interaction is everything”. Talk to us. And discover a partner dedicated to providing exactly what you need:

- Convenient ready-to-use kits
- Custom assay capabilities
- Expert technical support
- Complete confidentiality
- Trusted and proven HTRF technology

