



Applications

- Research tool for *in vitro* staining and quantification of MET using IHC on FFPE samples
- Potential diagnostic tool for clinical applications related to detection of MET expression
- Also works for Western blotting

Benefits

- Accurate detection of MET
- High specificity and consistency
- Effectively detects MET in a range of solid tumor samples

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Patent Status: Issued
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Met4 Monoclonal Antibody

This novel monoclonal antibody against MET provides highly specific and consistent detection on formalin-fixed and paraffin-embedded (FFPE) samples.

Background

In 2014, there will be an estimated 1.6 million new cancer cases and more than 580,000 cancer-related deaths in the U.S.; breast, prostate, lung, and colon cancers are expected to comprise more than 40 percent of these new cases and close to 50 percent of the predicted cancer deaths. Increased amounts of the MET protein can be found in many tumor types including breast, prostate, lung, colon, liver, and kidney cancers. For example, MET protein levels are greatly increased in 20–30 percent of breast cancer cases, serving as a marker for reduced survival rates.

Technology

FFPE samples are the most common tissue samples taken to evaluate drug target expression when a patient is undergoing a cancer diagnosis. Samples then are screened for the presence of specific protein markers to evaluate the stage and severity of the disease. The MET protein regulates cellular proliferation, migration, and differentiation during development and tissue growth. Tools that provide an accurate way to measure MET levels can help assess whether MET inhibitory drugs and/or other therapeutics will prove effective for individual cases.

Met4 is a mouse monoclonal antibody that provides specific and consistent MET staining on FFPE samples. Raised against the extracellular domain of MET in FFPE tissues, Met4 can be used to quantify MET levels in these samples using immunohistochemistry (IHC) techniques. Met4 works on a variety of FFPE tumor samples including breast, prostate, and lung tissue.

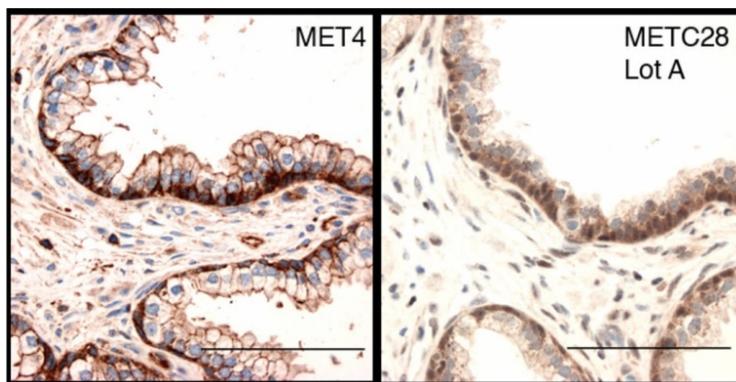


Figure 1: Comparison of Met4 (left) versus MetC28 (commercial antibody; right) antibodies staining normal prostate FFPE tissue. Met4 clearly detects the expression of MET in basal epithelial cells, intercellular plasma membrane of luminal prostate cells, and endothelial cells.

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