# abcam

## Product datasheet

# Met (pY1234/pY1235) + total Met ELISA Kit ab126451

2 References 4 Images

Overview

**Product name** Met (pY1234/pY1235) + total Met ELISA Kit

**Detection method** Colorimetric

Sample type Cell Lysate, Tissue Lysate

Assay type Semi-quantitative

Assay time 5h 00m

**Assay duration** Multiple steps standard assay

Species reactivity Reacts with: Mouse, Rat, Human

**Product overview** ab126451 is a very rapid, convenient and sensitive assay kit that can monitor the activation or

function of important biological pathways in human and mouse cell lysates. By determining phosphorylated Met protein in your experimental model system, you can verify pathway activation in your cell lysates. You can simultaneously measure numerous different cell lysates without

spending excess time and effort in performing a Western Blotting analysis.

This Sandwich ELISA kit is an in vitro enzyme-linked immunosorbent assay for the measurement of phospho-Met (Tyr1234/1235) and total Met in human, and mouse cell lysates (help normalize the results of phospho-Met from different cell lysate being compared). A pan Met antibody has been coated onto a 96-well plate. Samples are pipetted into the wells and Met present in a sample is bound to the wells by the immobilized antibody. The wells are washed and antiphospho-Met (Tyr1234/1235) or anti-pan-Met is used to detect phosphorylated or total Met. After washing away unbound antibody, HRP-conjugated anti-rabbit IgG is pipetted to the wells. The wells are again washed, a TMB substrate solution is added to the wells and color develops in proportion to the amount of Met (Tyr1234/1235) or total Met bound. The Stop Solution changes

the color from blue to yellow, and the intensity of the color is measured at 450 nm.

Notes Abcam has not and does not intend to apply for the REACH Authorisation of customers' uses of

products that contain European Authorisation list (Annex XIV) substances.

It is the responsibility of our customers to check the necessity of application of REACH

Authorisation, and any other relevant authorisations, for their intended uses.

**Platform** Microplate

**Properties** 

**Storage instructions** Store at -20°C. Please refer to protocols.

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Components	1 x 96 tests
1000X HRP-conjugated anti-rabbit lgG	1 x 25µl
20X Wash Buffer	1 x 25ml
2X Cell Lysis Buffer	1 x 5ml
5X Assay Diluent	1 x 15ml
Detection Antibody Met	1 vial
Detection Antibody Met (Y1234/1235)	1 vial
Met Microplate (12 strips x 8 wells) coated with anti-pan Met antibody	1 unit
Positive Control: lyophilized powder from H1993 cell lysate	1 vial
Stop Solution	1 x 8ml
TMB One-Step Substrate Reagent	1 x 12ml

#### **Function**

Involvement in disease

Receptor for hepatocyte growth factor and scatter factor. Has a tyrosine-protein kinase activity. Functions in cell proliferation, scattering, morphogenesis and survival.

Note=Activation of MET after rearrangement with the TPR gene produces an oncogenic protein. Note=Defects in MET may be associated with gastric cancer.

Defects in MET are a cause of hepatocellular carcinoma (HCC) [MIM:114550].

Defects in MET are a cause of renal cell carcinoma papillary (RCCP) [MIM:605074]. It is a subtype of renal cell carcinoma tending to show a tubulo-papillary architecture formed by numerous, irregular, finger-like projections of connective tissue. Renal cell carcinoma is a heterogeneous group of sporadic or hereditary carcinoma derived from cells of the proximal renal tubular epithelium. It is subclassified into common renal cell carcinoma (clear cell, non-papillary carcinoma), papillary renal cell carcinoma, chromophobe renal cell carcinoma, collecting duct carcinoma with medullary carcinoma of the kidney, and unclassified renal cell carcinoma. Note=A common allele in the promoter region of the MET shows genetic association with susceptibility to autism in some families. Functional assays indicate a decrease in MET promoter activity and altered binding of specific transcription factor complexes.

Note=MET activating mutations may be involved in the development of a highly malignant, metastatic syndrome known as cancer of unknown primary origin (CUP) or primary occult malignancy. Systemic neoplastic spread is generally a late event in cancer progression. However, in some instances, distant dissemination arises at a very early stage, so that metastases reach clinical relevance before primary lesions. Sometimes, the primary lesions cannot be identified in spite of the progresses in the diagnosis of malignancies.

# Sequence similarities

Belongs to the protein kinase superfamily. Tyr protein kinase family.

Contains 3 IPT/TIG domains.

Contains 1 protein kinase domain.

Contains 1 Sema domain.

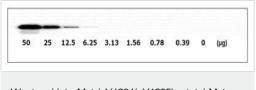
Domain

The kinase domain is involved in SPSB1 binding.

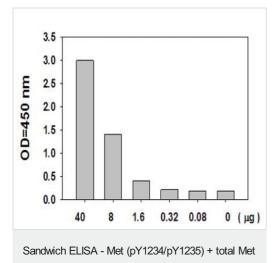
Post-translational modifications

Dephosphorylated by PTPRJ at Tyr-1349 and Tyr-1365.

#### **Images**



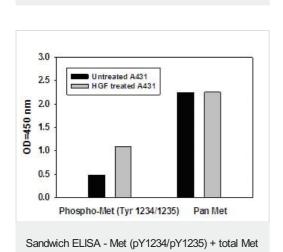
Western blot - Met (pY1234/pY1235) + total Met ELISA Kit (ab126451) H1993 cells were cultured at  $37^{\circ}$ C for 4 days. Solubilize cells at 4 x  $10^7$  cells/ml in Cell Lysate Buffer. Serial dilutions of lysates were analyzed by Western blot.



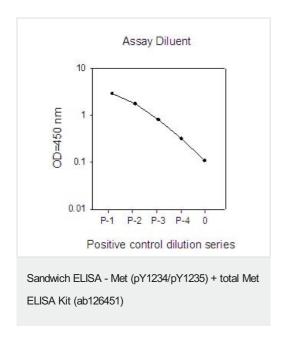
ELISA Kit (ab126451)

ELISA Kit (ab126451)

H1993 cells were cultured at  $37^{\circ}$ C for 4 days. Solubilize cells at 4 x  $10^{7}$  cells/ml in Cell Lysate Buffer. Serial dilutions of lysates were analyzed using ab126451.



A431 cells were treated or untreated with 50 ng/ml recombinant human HGF for 5 min. Cell lysates were analyzed using ab126451.



H1993 cells were cultured at  $37^{\circ}$ C for 4 days. Solubilize cells at 4 x  $10^{7}$  cells/ml in Cell Lysate Buffer. Serial dilutions of lysates were analyzed using ab126451.

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