abcam

Product datasheet

Mouse Met ELISA Kit (c-Met) ab275107

Recombinant SimpleStep ELISA

4 Images

Overview

Product name Mouse Met ELISA Kit (c-Met)

Detection method Colorimetric

Precision

Intra-assay

Sample	n	Mean	SD	CV%
Serum	8			6.9%

Sample type Cell culture supernatant, Serum, Cell culture media, Hep Plasma, EDTA Plasma, Cit plasma

Assay type Sandwich (quantitative)

Sensitivity 10 pg/ml

Range 54.69 pg/ml - 3500 pg/ml

Recovery

Sample specific recovery

Sample type	Average %	Range
Cell culture supernatant	118	% - %
Serum	110	% - %
Cell culture media	84	% - %
Hep Plasma	100	% - %
EDTA Plasma	114	% - %
Cit plasma	115	% - %

Assay time 1h 30m

Assay duration One step assay

Species reactivity **Reacts with:** Mouse

Product overview Mouse Met ELISA kit (ab275107) is a single-wash 90 min sandwich ELISA designed for the

quantitative measurement of Mouse Met protein in serum, plasma and cell culture supernatant. It uses our proprietary SimpleStep ELISA® technology. Quantitate Mouse Met with 10 pg/mL sensitivity.

SimpleStep ELISA® technology employs capture antibodies conjugated to an affinity tag that is recognized by the monoclonal antibody used to coat our SimpleStep ELISA® plates. This approach to sandwich ELISA allows the formation of the antibody-analyte sandwich complex in a single step, significantly reducing assay time. See the SimpleStep ELISA® protocol summary in the image section for further details. Our SimpleStep ELISA® technology provides several benefits:

-Single-wash protocol reduces assay time to 90 minutes or less

-High sensitivity, specificity and reproducibility from superior antibodies

-Fully validated in biological samples

-96-wells plate breakable into 12 x 8 wells strips

A 384-well SimpleStep ELISA® microplate (**ab203359**) is available to use as an alternative to the 96-well microplate provided with SimpleStep ELISA® kits.

Notes

Met, also known as Hepatocyte Growth Factor Receptor (HGFR)or Proto-Oncogene c-Met (c-Met) is a receptor tyrosine kinase that transduces signals from the extracellular matrix into the cytoplasm by binding to hepatocyte growth factor ligand. Met regulates many physiological processes including proliferation, scattering, morphogenesis and survival. Ligand binding at the cell surface induces autophosphorylation of Met on its intracellular domain that provides docking sites for downstream signaling molecules. The recruitment of these downstream effectors by Met leads to the activation of several signaling cascades including the RAS-ERK, PI3 kinase-AKT, or PLC gamma-PKC. During embryonic development, Met signaling plays a role in gastrulation, development and migration of muscles and neuronal precursors, angiogenesis and kidney formation. In adults, Met participates in wound healing as well as organ regeneration and tissue remodeling. Met promotes also differentiation and proliferation of hematopoietic cells.

Platform

Pre-coated microplate (12 x 8 well strips)

Properties

Storage instructions

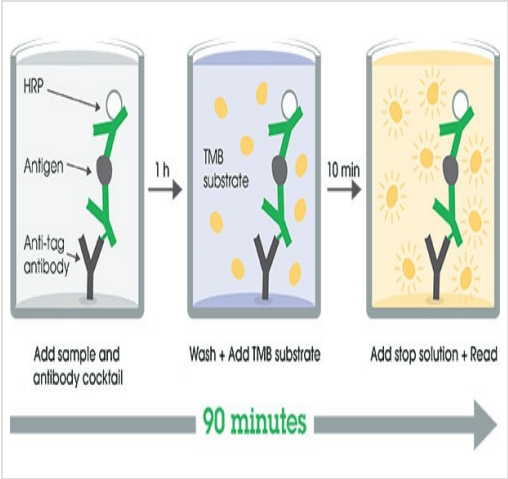
Store at +4°C. Please refer to protocols.

Components	1 x 96 tests
10X Mouse Met (c-Met) Capture Antibody	1 x 600µl
10X Mouse Met (c-Met) Detector Antibody	1 x 600µl
10X Wash Buffer PT (ab206977)	1 x 20ml
Antibody Diluent 4BR	1 x 6ml

Components	1 x 96 tests
Mouse Met (c-Met) Lyophilized Recombinant Protein	2 vials
Plate Seals	1 unit
Sample Diluent NS (ab193972)	2 x 50ml
SimpleStep Pre-Coated 96-Well Microplate (ab206978)	1 unit
Stop Solution	1 x 12ml
TMB Development Solution	1 x 12ml

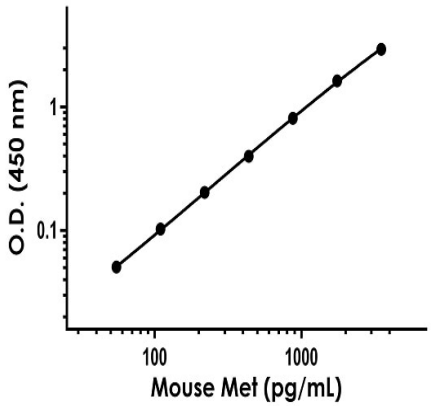
Function	Receptor for hepatocyte growth factor and scatter factor. Has a tyrosine-protein kinase activity. Functions in cell proliferation, scattering, morphogenesis and survival.
Involvement in disease	Note=Activation of MET after rearrangement with the TPR gene produces an oncogenic protein. Note=Defects 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.
Cellular localization	Membrane.

Images



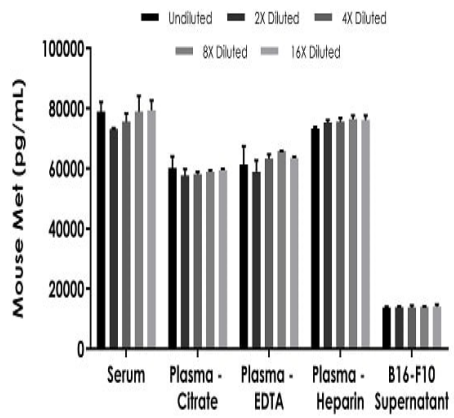
SimpleStep ELISA Protocol Diagram

SimpleStep ELISA technology allows the formation of the antibody-antigen complex in one single step, reducing assay time to 90 minutes. Add samples or standards and antibody mix to wells all at once, incubate, wash, and add your final substrate. See protocol for a detailed step-by-step guide.



Example of mouse Met standard curve in Sample Diluent NS.

The Met standard curve was prepared as described in Section 10. Raw data values are shown in the table. Background-subtracted data values (mean +/- SD) are graphed.



Interpolated concentrations of native Met in mouse serum, plasma and B16-F10 cell culture supernatant samples.

The concentrations of Met were measured in duplicates, interpolated from the Met standard curves and corrected for sample dilution. Undiluted samples are as follows: serum 4%, plasma (citrate) 4%, plasma (EDTA) 4%, plasma (heparin) 4% and B16-F10 cell culture supernatant 20%. The interpolated dilution factor corrected values are plotted (mean +/- SD, n=2). The mean Met concentration was determined to be 77,215 pg/mL in neat serum, 58,861 pg/mL in neat plasma (citrate), 62,541 pg/mL in neat plasma (EDTA), 75,355 pg/mL in neat plasma (heparin) and 13,898 pg/mL in neat B16-F10 supernatant.

Sandwich ELISA - Mouse Met ELISA Kit (c-Met) (ab275107)

To learn more about the advantages of recombinant antibodies see **here**.

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