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# Datasheet for ABIN625241

# **c-MET ELISA Kit**





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#### Overview

Quantity:	96 tests
Target:	c-MET (MET)
Binding Specificity:	pTyr1234, total
Reactivity:	Human, Mouse, Rat
Method Type:	Sandwich ELISA
Application:	ELISA
Product Details	
Purpose:	Human/Mouse/Rat Phospho-Met (Y1234) and Total Met ELISA Kit. This assay semi-
	quantitatively measures phophorylated Met (Tyr1234) and Total Met in lysate samples.
Sample Type:	Cell Lysate, Tissue Lysate
Analytical Method:	Semi-Quantitative
Detection Method:	Colorimetric
Specificity:	The antibody pair provided in this kit recognizes human and mouse Phospho-Met (pTyr1234) + pan Mek.
Characteristics:	Simultaneously measure Phosphorylated protein and pan protein in one experiment (for normalization purpose)
	<ul> <li>Screen numerous different cell lysates without performing a Western Blot analysis</li> <li>Minimal hands-on time, convenient, and non-radioactive material</li> </ul>
Components:	<ul><li>Pre-Coated 96-well Strip Microplate</li><li>Wash Buffer</li></ul>

## **Product Details**

- · Anti-Phospho Antibody
- · Anti-Pan Antibody
- · HRP-Conjugated Secondary Antibody
- · Streptavidin-Conjugated HRP
- · Assay Diluent
- · TMB One-Step Substrate
- · Stop Solution
- · Lysis Buffer
- · Positive Control Sample

#### Material not included:

- · Distilled or deionized water
- · 100 mL and 1 liter graduated cylinders
- Tubes to prepare sample dilutions
- · Protease and Phosphatase inhibitors
- Precision pipettes to deliver 2  $\mu L$  to 1 mL volumes
- Adjustable 1-25 mL pipettes for reagent preparation
- · Benchtop rocker or shaker
- Microplate reader capable of measuring absorbance at 450 nm

# **Target Details**

Target:	c-MET (MET)
Alternative Name:	Met (MET Products)
Background:	Met-Y1234
Gene ID:	4233
UniProt:	P08581
Pathways:	RTK Signaling, Carbohydrate Homeostasis, Synaptic Membrane, Signaling of Hepatocyte  Growth Factor Receptor

## **Application Details**

Sample Volume:	100 μL
Plate:	Pre-coated
Protocol:	1. Prepare all reagents and samples as instructed in the manual.
	2. Add 100 µL of sample or positive control to each well.
	3. Incubate 2.5 h at RT or O/N at 4 °C.
	4. Add 100 μL of prepared primary antibody to each well.
	5. Incubate 1 h at RT.

- 6. Add 100 µL of prepared 1X HRP-Streptavidin to each well.
- 7. Incubate 1 h at RT.
- 8. Add 100 µL of TMB One-Step Substrate Reagent to each well.
- 9. Incubate 30 min at RT.
- 10. Add 50 µL of Stop Solution to each well.
- 11. Read at 450 nm immediately.

#### Reagent Preparation:

- 1. Bring all reagents and samples to room temperature (18 25 °C) before use.
- 2. Item E, Assay Diluent should be diluted 5-fold with deionized or distilled water before use.
- 3. Preparation of Positive Control: Briefly spin the Positive Control vial of Item K. Add 400  $\mu$ L 1x Assay Diluent (Item E, Assay Diluent should be diluted 5-fold with deionized or distilled water Phospho-Met (Tyr1234/1235) and pan Met ELISA Kit Protocol 6 before use) into Item K vial to prepare Positive Control (P-1) Solution (See i. Positive Control of part IX.for a typical result in page 9). Dissolve the powder thoroughly by a gentle mix (it can be removed by centrifuge if any precipitate in the solution is found). Pipette 260  $\mu$ L 1x Assay Diluent into each tube. Use the Positive Control (1) to produce a dilution series (shown below). Mix each tube thoroughly before the next transfer. 1x Assay Diluent serves as the background.
- 4. If the Wash Concentrate (20x) (Item B) contains visible crystals, warm to room temperature and mix gently until dissolved. Dilute 20 mL of Wash Buffer Concentrate into deionized or distilled water to yield 400 mL of 1x Wash Buffer.
- 5. Briefly spin the detection antibody (Item C-1 or Item C-2) before use. Add 100  $\mu$ L of 1x Assay Diluent into the vial to prepare a detection antibody concentrate. Pipette up and down to mix gently (the concentrate can be stored at 4 °C for 5 days or at -80 °C for one month). The antiphospho-Met (Tyr1234/1235) or anti-pan-Met antibody should be diluted 55-fold with 1x Assay Diuent and used in step 4 of Part VII Assay Procedure. P-1 P-2 P-3 P-4 0 130  $\mu$ L Positive Control powder 400  $\mu$ L 1x Assay Diluent 130 $\mu$ I 130  $\mu$ L Phospho-Met (Tyr1234/1235) and pan Met ELISA Kit Protocol 7
- 6. Briefly spin the HRP-conjugated anti-rabbit IgG (Item D-1) before use. Pipette up and down to mix gently. HRP-conjugated anti-rabbit IgG concentrate should be diluted 1,000-fold with 1x Assay Diuent. For example: Briefly spin the vial (Item D-1) and pipette up and down to mix gently. Add 10  $\mu$ L of HRP-conjugated anti-rabbit IgG concentrate into a tube with 10 mL 1x AssayDiluent to prepare a 1,000-fold diluted HRP-conjugated anti-rabbit IgG solution.
- 7. Cell Lysate Buffer should be diluted 2-fold with deionized or distilled water before use (recommend to add protease and phosphatase inhibitors). VII.

#### Sample Preparation:

Cell and tissue lysates - Rinse cells with PBS, making sure to remove any remaining PBS before adding the Cell Lysate Buffer. Solubilize cells at  $4 \times 107$  cells/mL in  $1 \times 100$  Cell Lysate Buffer (we recommend adding protease and phosphatase inhibitors to Cell Lysate Buffer prior to sample

preparation). Pipette up and down to resuspend and incubate the lysates with shaking at 2 - 8° C for 30 minutes. Microcentrifuge at 13,000 rpm for 10 minutes at 2 - 8° C, and transfer the supernates into a clean test tube. Lysates should be Phospho-Met (Tyr1234/1235) and pan Met ELISA Kit Protocol 5 used immediately or aliquoted and stored at -70 °C. Avoid repeated freezethaw cycles. Thawed lysates should be kept on ice prior to use.

For the initial experiment, we recommend to do a serial dilution testing such as 5-fold and 50-fold dilution for your cell and tissue lysates with Assay Diluent (Item E) before use.

Note: The fold dilution of sample used depends on the abundance of phosphorylated proteins and should be determined empiricallys. More of the sample can be used if signals are too weak. If signals are too strong, the sample can be diluted further.

Cell Lysate Buffer should be diluted 2-fold with deionized or distilled water before use (recommend to add protease and phosphatase inhibitors).

#### Assay Procedure:

- 1. Bring all reagents to room temperature (18 25 °C) before use. It is recommended that all samples or Positive Control should be run at least in duplicate. Add 100  $\mu$ L of each sample or positive control into appropriate wells. Cover well with plate holder and incubate for 2.5 hours at room temperature or over night at 4 °C with shaking.
- 2. Discard the solution and wash 4 times with 1x Wash Solution. Wash by filling each well with Wash Buffer (300  $\mu$ L) using a multi-channel pipette or autowasher. Complete removal of Phospho-Met (Tyr1234/1235) and pan Met ELISA Kit Protocol 8 liquid at each step is essential to good performance. After the last wash, remove any remaining Wash Buffer by aspirating or decanting. Invert the plate and blot it against clean paper towels.
- 3. Add 100  $\mu$ L of prepared 1x rabbit anti-phospho-Met (Tyr1234/1235) antibody or 1x rabbit anti-pan-Met (Reagent Preparation step 5) to appropriate wells. Incubate for 1 hour at room temperature with shaking.
- 4. Discard the solution. Repeat the wash as in step3.
- 5. Add 100  $\mu$ L of prepared 1X HRP-conjugated anti-rabbit IgG to corresponding well. Incubate for 1 hour at room temperature with shaking.
- 6. Discard the solution. Repeat the wash as in step3.
- 7. Add 100  $\mu$ L of TMB One-Step Substrate Reagent (Item H) to each well. Incubate for 30 minutes at room temperature in the dark with shaking.
- 8. Add 50  $\mu L$  of Stop Solution (Item I) to each well. Read at 450 nm immediately.

#### Calculation of Results:

ELISA data analysis: Average the duplicate readings for each sample or positive.

i. Positive Control H1993 cells were cultured at 37 °C for 4 days. Solubilize cells at 4 x 107 cells/mL in Cell Lysate Buffer. Serial dilutions of lysates were Phospho-Met (Tyr1234/1235) and pan Met ELISA Kit Protocol 10 analyzed in this ELISA. Please see step 3 of Part VI Reagent

Preparation for detail. Assay Diluent Positive control dilution series 0 D = 450 n m 0.010.11 10 P-1 P-2 P-3 P-40

ii. Recombinant Human HGF Stimulation of A431 Cell Lines A431 cells were treated or untreated with 50 ng/mL recombinant human HGF for 5 min. Cell and tissue lysates were analyzed using the phosphoELISA. Phospho-Met (Tyr1234/1235) and pan Met ELISA Kit Protocol 11 Phospho-Met (Tyr 1234/1235) Pan Met O D =4 50 n m 0.0 0.5 1.0 1.5 2.0 2.5 3.0 Untreated A431 HGF treated A431

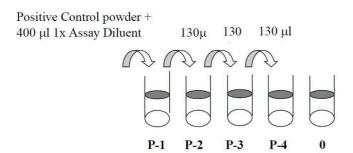
iii. SENSITIVITY H1993 cells were cultured at 37 °C for 4 days. Solubilize cells at 4 x 107 cells/mL in Cell Lysate Buffer. Serial dilutions of lysates were analyzed in this ELISA and by Western blot. Immunoblots were incubated with anti-phospho-Met (Tyr1234/1235). A) ELISA 40 8 1.6 0.32 0.08 0 (  $\mu$ g ) 0 D =4 50 n m 0.0 0.5 1.0 1.5 2.0 2.5 3.0 3.5 Phospho-Met (Tyr1234/1235) and pan Met ELISA Kit Protocol 12 B). Western-Blot Analysis X

Restrictions:

For Research Use only

## Handling

Handling Advice:	Avoid repeated freeze- thaw cycles.
Storage:	-20 °C
Storage Comment:	Upon receipt, the kit should be stored at -20 °C. Please use within 6 months from the date of
	shipment. After initial use, Wash Buffer Concentrate (Item B), Assay Diluent (Item E), TMB One-
	Step Substrate Reagent (Item H), HRP-Streptavidin (Item G), Stop Solution (Item I) and Cell
	Lysate Buffer (Item J) should be stored at 4 °C to avoid repeated freeze-thaw cycles. Return
	unused wells to the pouch containing desiccant pack, reseal along entire edge and store at -20
	°C. Reconstituted Positive Control (Item K) should be stored at -70 °C.
Expiry Date:	6 months



**Image 1.** This picture shows the preparation of the positive control.

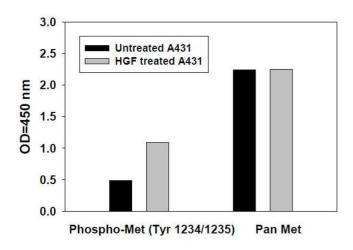
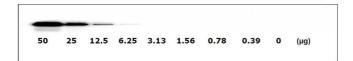


Image 2.

Image 3.

## B). Western-Blot Analysis



Please check the product details page for more images. Overall 4 images are available for ABIN625241.