Datasheet for ABIN2748087
ERK2 ELISA Kit

Overview

Quantity:	96 tests
Target:	ERK2 (MAPK1)
Binding Specificity:	pThr185, pTyr187, total
Reactivity:	Human, Rat, Mouse
Method Type:	Sandwich ELISA
Application:	ELISA

Product Details

Purpose:	Human/Mouse/Rat Phospho-Erk2 (T185/Y187) and Total ERK2 ELISA Kit. This assay semi-quantitatively measures phophorylated Erk2 (Thr185/Tyr187) and Total ERK2 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, mouse, or rat Phospho-ERK2 (pThr185/pTyr187) and total ERK2.
Characteristics:	• Simultaneously measure Phosphorylated protein and pan protein in one experiment (for normalization purpose) • Screen numerous different cell lysates without performing a Western Blot analysis • Minimal hands-on time, convenient, and non-radioactive material
Components:	• Pre-Coated 96-well Strip Microplate

Product Details

- Wash Buffer
- 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 µL 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:	ERK2 (MAPK1)
Alternative Name:	Erk2 (MAPK1 Products)
Background:	ERK2, Mitogen-activated protein kinase 1, MAPK1, p42MAPK
Gene ID:	5594
UniProt:	P28482
Pathways:	MAPK Signaling, RTK Signaling, Apoptosis, Interferon-gamma Pathway, Fc-epsilon Receptor Signaling Pathway, Response to Growth Hormone Stimulus, Activation of Innate immune Response, Cellular Response to Molecule of Bacterial Origin, Hepatitis C, Protein targeting to Nucleus, Toll-Like Receptors Cascades, Monocarboxylic Acid Catabolic Process, Autophagy, G-protein mediated Events, Signaling Events mediated by VEGFR1 and VEGFR2, Signaling of Hepatocyte Growth Factor Receptor, VEGFR1 Specific Signals, BCR Signaling, S100 Proteins

Application Details

Sample Volume:	100 µL
Plate:	Pre-coated

Application Details

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.

Assay Procedure:	Prepare all reagents and samples as instructed in the manual.
	Add 100 µL of sample or positive control to each well.
	Incubate 2.5 h at RT or O/N at 4 °C.
	Add 100 µL of prepared primary antibody to each well.
	Incubate 1 h at RT.
	Add 100 µL of prepared 1X HRP-Streptavidin to each well.
	Incubate 1 h at RT.
	Add 100 µL of TMB One-Step Substrate Reagent to each well.
	Incubate 30 min at RT.
	Add 50 µL of Stop Solution to each well.
	Read at 450 nm immediately.

Restrictions:	For Research Use only

Handling

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