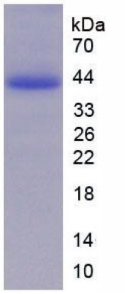
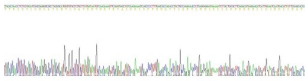
Human Mitogen-Activated Protein Kinase 1 / ERK2 (MAPK1) Protein (Active)

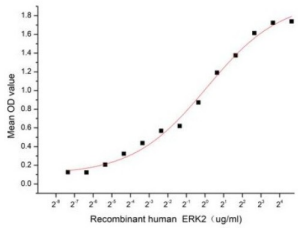
Catalogue No.:abx652294



SDS-PAGE analysis of Human MAPK1 Protein.



Gene sequencing extract of Human MAPK1 Protein.



Binding activity of MAPK1 with recombinant Human STAT3.

Human Mitogen-Activated Protein Kinase 1 / ERK2 (MAPK1) Protein is an active Human protein produced in a Prokaryotic expression system (E. coli).

Target:	Mitogen-Activated Protein Kinase 1 / ERK2 (MAPK1)
Research Area:	Signal Transduction, Enzymes and Kinases, Tumour Immunity
Origin:	Human
Expression:	Recombinant
Tested Applications:	WB, SDS-PAGE
Host:	E. coli

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Conjugation:	Unconjugated
Form:	Lyophilized
Purity:	> 95%
Reconstitution:	To keep the original salt concentration, we recommend reconstituting to the original concentration prior to lyophilization (see Concentration) in ddH_2O. If a lower concentration is required, dilute in 10 mM PBS, pH 7.4. If a higher concentration is required, the product can be reconstituted directly in 10 mM PBS, pH 7.4, though please note that this will change the overall salt concentration. The stock concentration should be between 0.1-1.0 mg/ml. Do not vortex.
Storage:	Store at 2-8 °C for up to one month. Store at -80 °C for up to one year. Avoid repeated freeze/thaw cycles.
UniProt Primary AC:	P28482 (UniProt, ExPASy)
KEGG:	hsa:5594
String:	9606.ENSP00000215832
Molecular Weight:	Calculated MW: 42.8 kDa Observed MW: 43 kDa (determined by SDS-PAGE)
Sequence Fragment:	Tyr25-Ser360
Sequence:	YTNLSY IGEGAYGMVC SAYDNVNKVR VAIKKISPFE HQTYCQRTLR EIKILLRFRH ENIIGINDII RAPTIEQMKD VYIVQDLMET DLYKLLKTQH LSNDHICYFL YQILRGLKYI HSANVLHRDL KPSNLLLNTT CDLKICDFGL ARVADPDHDH TGFLTEYVAT RWYRAPEIML NSKGYTKSID IWSVGCILAE MLSNRPIFPG KHYLDQLNHI LGILGSPSQE DLNCIINLKA RNYLLSLPHK NKVPWNRLFP NADSKALDLL DKMLTFNPHK RIEVEQALAH PYLEQYYDPS DEPIAEAPFK FDMELDDLPK EKLKELIFEE TARFQPGYRS
Tag:	N-terminal His tag
Buffer:	Prior to lyophilization: PBS, pH 7.4, containing 0.01% Sarcosyl and 5% Trehalose.
Activity:	Active
Biological Activity:	STAT3 has been identified as an interactor of MAPK1, therefore a binding ELISA assay was conducted to detect the interaction of recombinant Human MAPK1 and recombinant Human STAT3. Briefly, MAPK1 was diluted serially in PBS with 0.01% BSA (pH 7.4). Duplicate samples of 100 µl were then transferred to STAT3-coated microplate wells and incubated for 2 h at 37 °C. Wells were washed with PBST and incubated for 1 h with anti-MAPK1 polyclonal antibody, then aspirated and washed 3 times. After incubation with HRP-conjugated secondary antibody, the wells were aspirated and washed 3 times. TMB substrate solution was added to the wells, which were then incubated for 15-25 minutes at 37°C. Finally, 50 µl stop solution was added to the wells and the absorbance was measured at 450 nm immediately. The binding activity of MAPK1 and STAT3 is shown in Figure 3, the EC50 is 1.06 µg/ml.

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Endotoxin Level: < 1.0 EU per 1 µg (LAL method)

Concentration: Prior to lyophilization: 1000 µg/ml

Note: THIS PRODUCT IS FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC, THERAPEUTIC OR COSMETIC PROCEDURES. NOT FOR HUMAN OR ANIMAL CONSUMPTION.

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