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# Product datasheet for CF502187

## ERK5 (MAPK7) Mouse Monoclonal Antibody [Clone ID: OTI4C1]

### Product data:

| | |
|---|---|
| **Product Type:** | Primary Antibodies |
| **Clone Name:** | OTI4C1 |
| **Applications:** | FC, IF, WB |
| **Recommended Dilution:** | WB 1:200~500, IF 1:100, FLOW 1:100 |
| **Reactivity:** | Human, Mouse, Rat |
| **Host:** | Mouse |
| **Isotype:** | IgG1 |
| **Clonality:** | Monoclonal |
| **Immunogen:** | Full length human recombinant protein of human MAPK7 (NP_002740) produced in HEK293T cell. |
| **Formulation:** | Lyophilized powder (original buffer 1X PBS, pH 7.3, 8% trehalose) |
| **Reconstitution Method:** | For reconstitution, we recommend adding 100uL distilled water to a final antibody concentration of about 1 mg/mL. To use this carrier-free antibody for conjugation experiment, we strongly recommend performing another round of desalting process. (OriGene recommends Zeba Spin Desalting Columns, 7KMWCO from Thermo Scientific) |
| **Purification:** | Purified from mouse ascites fluids or tissue culture supernatant by affinity chromatography (protein A/G) |
| **Conjugation:** | Unconjugated |
| **Storage:** | Store at -20°C as received. |
| **Stability:** | Stable for 12 months from date of receipt. |
| **Predicted Protein Size:** | 88.2 kDa |
| **Gene Name:** | mitogen-activated protein kinase 7 |
| **Database Link:** | NP_002740<br>Entrez Gene 23939 MouseEntrez Gene 114509 RatEntrez Gene 5598 Human<br>Q13164 |

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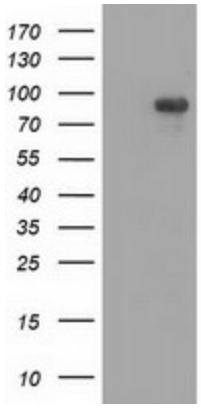
**Background:** The protein encoded by this gene is a member of the MAP kinase family. MAP kinases act as an integration point for multiple biochemical signals, and are involved in a wide variety of cellular processes such as proliferation, differentiation, transcription regulation and development. This kinase is specifically activated by mitogen-activated protein kinase kinase 5 (MAP2K5/MEK5). It is involved in the downstream signaling processes of various receptor molecules including receptor type kinases, and G protein-coupled receptors. In response to extracelluar signals, this kinase translocates to cell nucleus, where it regulates gene expression by phosphorylating, and activating different transcription factors. Four alternatively spliced transcript variants of this gene encoding two distinct isoforms have been reported. [provided by RefSeq]

**Synonyms:** BMK1; ERK4; ERK5; PRKM7

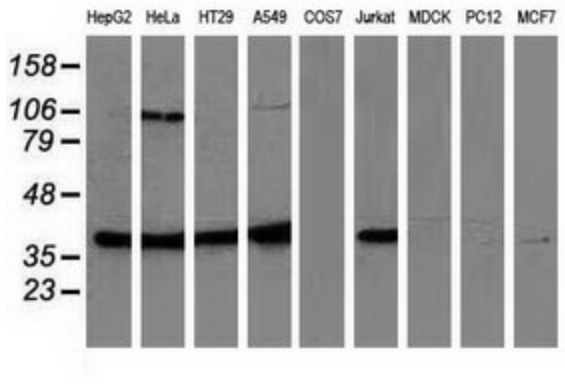
**Protein Families:** Druggable Genome, Protein Kinase

**Protein Pathways:** Gap junction, GnRH signaling pathway, MAPK signaling pathway, Neurotrophin signaling pathway

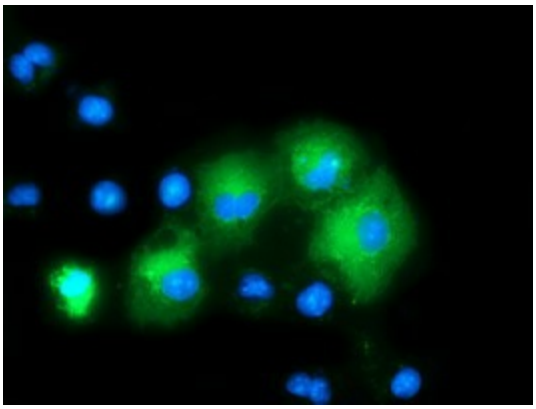
## Product images:



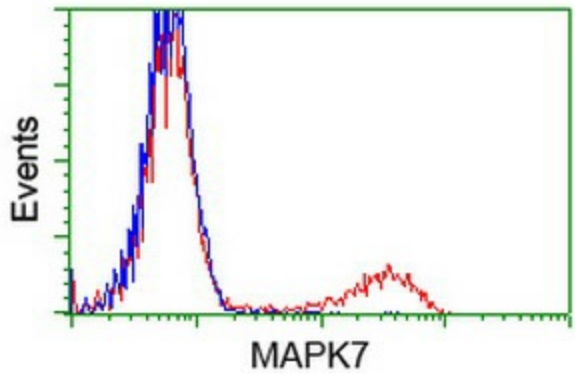

HEK293T cells were transfected with the pCMV6-ENTRY control (Left lane) or pCMV6-ENTRY MAPK7 ([RC203506], Right lane) cDNA for 48 hrs and lysed. Equivalent amounts of cell lysates (5 ug per lane) were separated by SDS-PAGE and immunoblotted with anti-MAPK7. Positive lysates [LY419130] (100ug) and [LC419130] (20ug) can be purchased separately from OriGene.




Western blot analysis of extracts (35ug) from 9 different cell lines by using anti-MAPK7 monoclonal antibody.



Anti-MAPK7 mouse monoclonal antibody ([TA502187]) immunofluorescent staining of COS7 cells transiently transfected by pCMV6-ENTRY MAPK7 ([RC203506]).




HEK293T cells transfected with either [RC203506] overexpress plasmid (Red) or empty vector control plasmid (Blue) were immunostained by anti-MAPK7 antibody ([TA502187]), and then analyzed by flow cytometry.