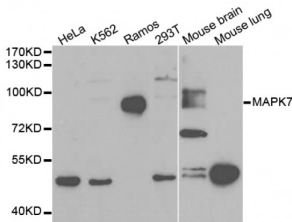


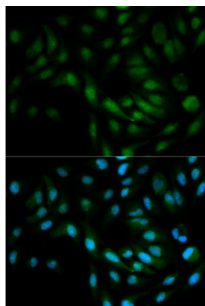
Abbexa Ltd, Innovation Centre, Cambridge Science Park, Cambridge, CB4 0EY, UK  
 Telephone: +44 (0) 1223 755950 - Fax: +44 (0) 1223 755951 - E-Mail: info@abbexa.com

## Mitogen Activated Protein Kinase 7 (MAPK7) Antibody

Catalogue No.: abx001723



Western blot analysis of extracts of various cell lines, using MAPK7 antibody (abx001723) at 1/1000 dilution.



Immunofluorescence analysis of MCF-7 cells using MAPK7 antibody (abx001723). Blue: DAPI for nuclear staining.

MAPK7 Antibody is a Rabbit Polyclonal antibody against MAPK7. ERK5 (Mitogen-activated protein kinase 7, Big mitogen-activated protein kinase 1) is a member of the MAPK superfamily implicated in the regulation numerous cellular processes including proliferation, differentiation, and survival (1,5-7). Like other MAPK family members, ERK5 contains a canonical activation loop TEY motif (Thr218/Tyr220) which is specifically phosphorylated by MAP2K5 (MEK5) in a growth factor-dependent, Ras-independent mechanism (2-4). For example, EGF stimulation promotes ERK5 phosphorylation which induces its traslocation to the nucleus where it phosphorylates MEF2C and other transcriptional targets (2,3). ERK5 is also activated in response to granulocyte colony-stimulating factor (G-CSF) in hematopoetic progenitor cells where it promotes survival and proliferation (4). In neuronal cells, ERK5 is required for NGF-induced neurite outgrowth, neuronal homeostatis, and survival (11,12). ERK5 is thought to play a role in blood vessel integrity via maintainence of endothelial cell migration and barrier function (8-10). Although broadly expressed, research studies have shown that mice lacking erk5 display numerous cardiac defects, suggesting ERK5 plays a critical role in vascular development and homeostasis (1,5).

**Target:** MAPK7

**Reactivity:** Human, Mouse

**Host:** Rabbit

**Clonality:** Polyclonal

**Tested Applications:** WB, IF/ICC

**Recommended dilutions:** WB: 1/500 - 1/2000, IF/ICC: 1/50 - 1/200. Optimal dilutions/concentrations should be determined by the end user.

Abbexa Ltd, Innovation Centre, Cambridge Science Park, Cambridge, CB4 0EY, UK  
Telephone: +44 (0) 1223 755950 - Fax: +44 (0) 1223 755951 - E-Mail: [info@abbexa.com](mailto:info@abbexa.com)

|                          |   |
|--------------------------|---|
| <b>Immunogen:</b>        | Recombinant protein of human MAPK7.                               |
| <b>Purification:</b>     | Affinity purified.  |
| <b>Form:</b>             | Liquid  |
| <b>Isotype:</b>          | IgG   |
| <b>Conjugation:</b>      | Unconjugated  |
| <b>Storage:</b>          | Aliquot and store at -20 °C. Avoid repeated freeze/thaw cycles.   |
| <b>Molecular Weight:</b> | Calculated MW: 50 kDa/59 kDa/73 kDa/88 kDa<br>Observed MW: 47 kDa |
| <b>Swiss Prot:</b>       | <a href="#">Q13164</a>  |
| <b>GeneID:</b>           | <a href="#">5598</a>  |
| <b>Gene Symbol:</b>      | MAPK7   |
| <b>Concentration:</b>    | > 1 mg/ml   |
| <b>Buffer:</b>           | PBS, pH 7.3, 0.02% sodium azide, 50% glycerol.                    |
| <b>Note:</b>             | This product is for research use only.                            |