

ABfinity™ ERK-1 Recombinant Rabbit Monoclonal Antibody

Store at 2°C to 8°C (short-term), or -20°C (long-term)

Catalog Number 701183

Pub. No. MAN0007526 Rev. 1.00

Clonality: Monoclonal	Quantity: 100 µg	Volume: 200 µL	Concentration: 0.5 mg/mL
Host/Class: Rabbit IgG	Reactivity: Human ERK 1	Predicted Reactivity: Human	

Product Description

ERK-1 is a classical MAP kinase involved in intracellular signaling in response to extracellular stimulus. ERK-1 is activated by growth factors, hormones, and phorbol esters. ERKs are widely expressed in different cells, and are involved in control of cell proliferation, cell differentiation, and cytoskeletal regulation. ERK-1 is a serine/threonine kinase which phosphorylates cytoplasmic signaling molecules, cell surface receptors, transcription factors, and microtubule associated proteins upon activation by molecules upstream in the signal transduction pathway.

Product Specifications

Immunogen:	Folded protein domain corresponding to amino acids of Human ERK 1
Apparent MW:	~ 42 kDa
Gene ID:	5595
Protein Accession No.:	P27361
Sequence Identity:	Human
Isotype:	IgG ₁
Lot:	See product label

Product Applications

Application	Species	Test Material	Concentration
Western blotting	Human	U87MG, MCF-7, HeLa, HepG2, and Jurkat cells	1–2 µg/mL
Indirect ELISA	Human	Recombinant protein	1.5 × 10 ⁻⁴ to 3 µg/mL
Immunocytochemistry	Human	HeLa cells	1 µg/mL
Flow cytometry	Human	HeLa cells	1 µg/mL for 1 × 10 ⁻⁶ cells

Storage and handling

Store the antibody at 2°C to 8°C for up to 1 month, or -20°C for long storage. Avoid repeated freezing and thawing.

Stability

When stored as instructed, expires one year from date of receipt unless otherwise indicated on product label.

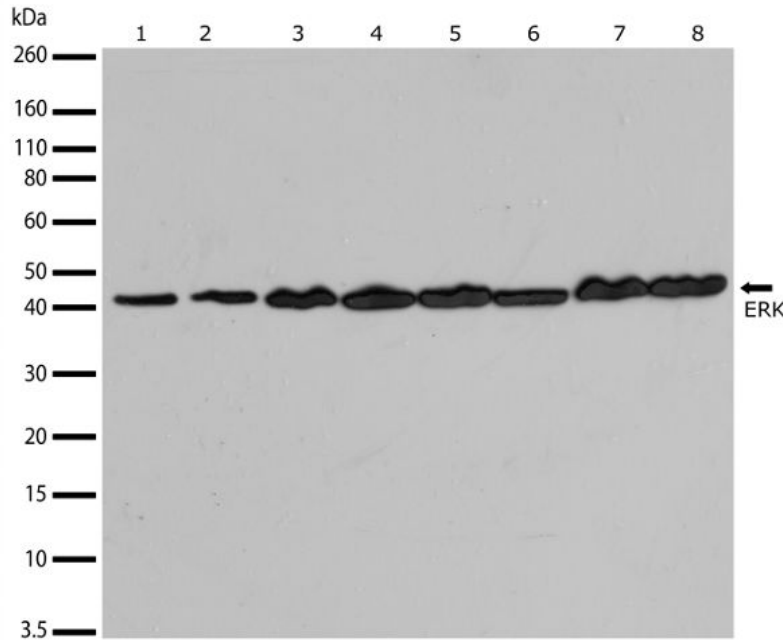


Figure 1 Western blot analysis of ABfinity™ ERK-1 Recombinant Rabbit Monoclonal Antibody (Cat. no. 701183).

Western blot analysis was performed on whole cell extracts from U87MG, MCF-7, HeLa, HepG2, MDA-MB-231, PC12, MDA-MB-453, and Jurkat cells (lanes 1–8 respectively). Endogenous level of ERK-1 was detected at ~42 kDa using ABfinity™ ERK-1 Recombinant Rabbit Monoclonal Antibody at a concentration of 1 µg/mL. The blot was developed using enhanced chemiluminescence (ECL) method.

Storage Buffer

Phosphate buffered saline (PBS) with 0.09% sodium azide.



CAUTION! Sodium azide is extremely toxic and may react with lead and copper plumbing to form highly explosive metal azides. Properly dispose of solutions containing sodium azide. Read the Safety Data Sheet (SDS) and follow the handling instructions. Wear appropriate protective eyewear, clothing and gloves. SDSs are available at www.lifetechnologies.com/support.

Product Documentation

To obtain a Certificate of Analysis or Safety Data Sheet (SDS), visit <http://www.lifetechnologies.com/support>.

Limited product warranty

Life Technologies Corporation and/or its affiliate(s) warrant their products as set forth in the Life Technologies' General Terms and Conditions of Sale found on Life Technologies' website at www.lifetechnologies.com/termsandconditions. If you have any questions, please contact Life Technologies at www.lifetechnologies.com/support.

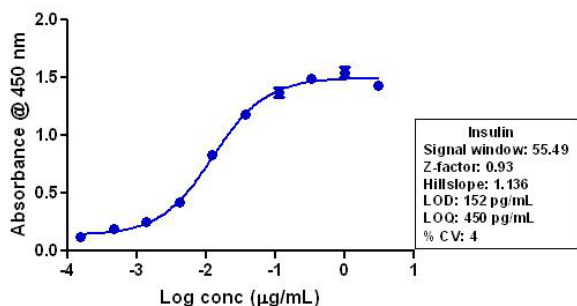


Figure 2 Indirect ELISA of ABfinity™ Insulin Recombinant Rabbit Monoclonal Antibody (Cat. no. 701265).

Indirect ELISA was performed using various dilutions of ABfinity™ Insulin Recombinant Rabbit Monoclonal Antibody to detect Insulin recombinant protein coated onto the plate. A non-linear regression analysis was performed (4 PL), LOD, and LOQ for the antibody was determined.

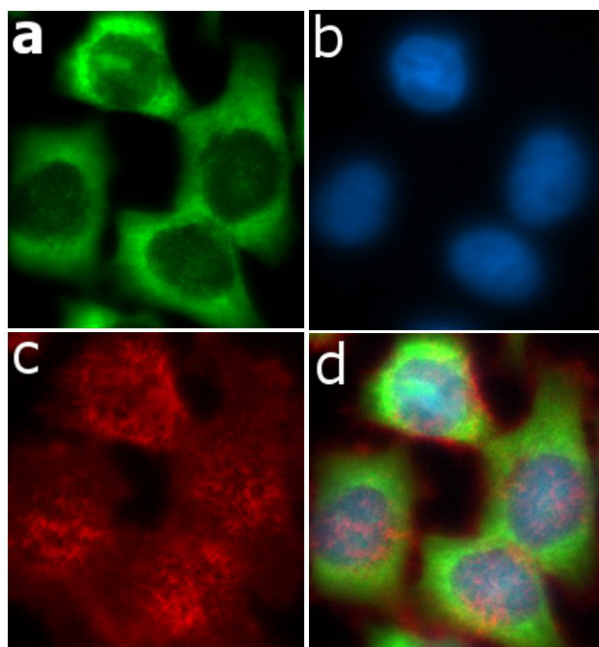


Figure 3 Immunocytochemistry analysis of ABfinity™ ERK1 Recombinant Rabbit Monoclonal Antibody (Cat. no. 701183).

Immunocytochemistry analysis of HeLa cells stained with ABfinity™ ERK1 Recombinant Rabbit Monoclonal Antibody using **a**: Alexa Fluor® 488 goat anti-rabbit as a secondary antibody (green). **b**: DAPI stained HeLa nuclei (blue). **c**: Actin stained with Alexa Fluor® 594 phalloidin (red). **d**: Composite image of cells showing cytoplasmic localization of ERK1.

Explanation of Symbols

Symbol	Description	Symbol	Description	Symbol	Description
	Manufacturer		Catalog number		Batch code
	Use by		Temperature limitation		
	Consult instructions for use		Caution, consult accompanying documents		

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