


Product datasheet

Anti-MARK4 (phospho T214) + MARK2 (phospho T208) + MARK3 (phospho T234) + MARK1 (phospho T215) antibody [EPR5463] ab126731

Recombinant RabMAb

6 Images

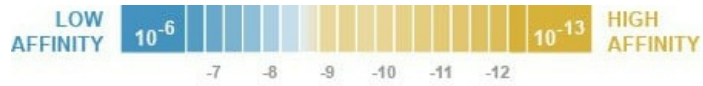
Overview

Product name	Anti-MARK4 (phospho T214) + MARK2 (phospho T208) + MARK3 (phospho T234) + MARK1 (phospho T215) antibody [EPR5463]
Description	Rabbit monoclonal [EPR5463] to MARK4 (phospho T214) + MARK2 (phospho T208) + MARK3 (phospho T234) + MARK1 (phospho T215)
Host species	Rabbit
Specificity	This antibody only detects MARK1 phosphorylated at Threonine 215.
Tested applications	Suitable for: WB, Dot blot, ELISA Unsuitable for: Flow Cyt, ICC/IF, IHC-P or IP
Species reactivity	Reacts with: Human Predicted to work with: Mouse, Rat 
Immunogen	Synthetic peptide. This information is proprietary to Abcam and/or its suppliers.
General notes	This product is a recombinant monoclonal antibody, which offers several advantages including: <ul style="list-style-type: none"> - High batch-to-batch consistency and reproducibility - Improved sensitivity and specificity - Long-term security of supply - Animal-free production For more information see here . Our RabMAb [®] technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to RabMAb[®] patents .

Properties

Form	Liquid
Storage instructions	Shipped at 4°C. Store at -20°C. Stable for 12 months at -20°C.
Dissociation constant (K_D)	K _D = 1.62 x 10 ⁻¹¹ M





[Learn more about K_D](#)

Storage buffer	pH: 7.20 Preservative: 0.01% Sodium azide Constituents: 9% PBS, 40% Glycerol (glycerin, glycerine), 0.05% BSA, 50% Tissue culture supernatant
Purity	Protein A purified
Clonality	Monoclonal
Clone number	EPR5463
Isotype	IgG

Applications

The Abpromise guarantee Our **Abpromise guarantee** covers the use of ab126731 in the following tested applications. The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

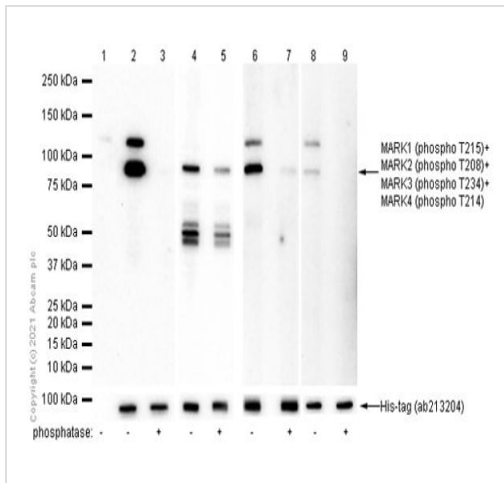
Application	Abreviews	Notes
WB		1/10000 - 1/50000. Detects a band of approximately 110 kDa (predicted molecular weight: 89 kDa).
Dot blot		1/1000.
ELISA		Use a concentration of 1000 µg/ml.

Application notes Is unsuitable for Flow Cyt, ICC/IF, IHC-P or IP.

Target

Cellular localization MARK4: Cytoplasm, cytoskeleton, microtubule organizing center, centrosome. Cytoplasm, cytoskeleton, microtubule organizing center. Cytoplasm, cytoskeleton, cilium basal body. Cytoplasm, cytoskeleton, cilium axoneme. Cytoplasm. Localized at the tips of neurite-like processes in differentiated neuroblast cells. Detected in the cytoplasm and neuropil of the hippocampus. MARK2: Cell membrane. Phosphorylated by PRKCZ in polarized epithelial cells, resulting in an interaction with YWHAZ which promotes relocation from the lateral to the apical membrane. MARK1: Cytoplasm > cytoskeleton. Appears to localize to an intracellular network.

Images



Western blot - Anti-MARK4 (phospho T214) + MARK2 (phospho T208) + MARK3 (phospho T234) + MARK1 (phospho T215) antibody [EPR5463] (ab126731)

Western blot analysis of ab126731 at a 1/20 dilution. Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated (**ab97051**) was used as a secondary antibody at 1/20000 dilution.

Lane 1: HEK-293 (Human embryonic kidney epithelial cell) transfected with an empty vector (vector control), containing a myc-His-tag®, whole cell lysate 15µg

Lane 2: HEK-293 transfected with MARK1 expression vector containing a myc-His-tag®, whole cell lysate 15µg

Lane 3: HEK-293 transfected with MARK1 expression vector containing a myc-His-tag®, whole cell lysate 15µg, then the membrane treated with Alkaline Phosphatase for 1 hour

Lane 4: HEK-293 transfected with MARK2 expression vector containing a myc-His-tag®, whole cell lysate 15µg

Lane 5: HEK-293 transfected with MARK2 expression vector containing a myc-His-tag®, whole cell lysate 15µg, then the membrane treated with Alkaline Phosphatase for 1 hour

Lane 6: HEK-293 transfected with MARK3 expression vector containing a myc-His-tag®, whole cell lysate 15µg

Lane 7: HEK-293 transfected with MARK3 expression vector containing a myc-His-tag®, whole cell lysate 15µg, then the membrane treated with Alkaline Phosphatase for 1 hour

Lane 8: HEK-293 transfected with MARK4 expression vector containing a myc-His-tag®, whole cell lysate 15µg

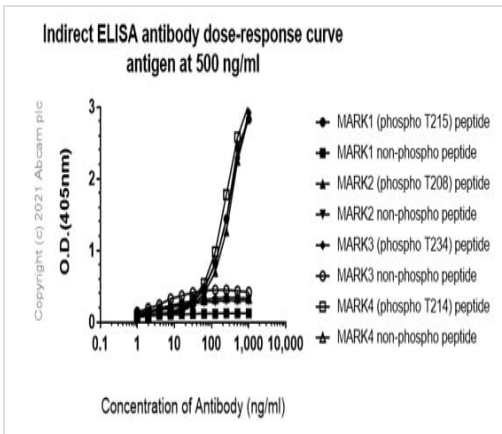
Lane 9: HEK-293 transfected with MARK4 expression vector containing a myc-His-tag®, whole cell lysate 15µg, then the membrane treated with Alkaline Phosphatase for 1 hour

Exposure time:

Lane 1 – 3, 6 - 9: 180 seconds

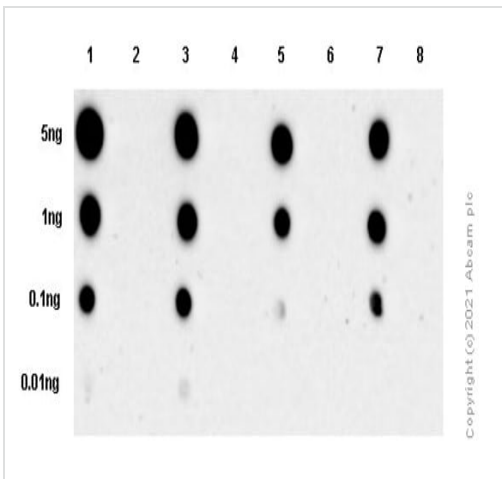
Lane 4 - 5: 7 seconds

Endogenous MARK proteins are observed at ~110 kDa reported by PMID: 9108484 and 16238695



ELISA - Anti-MARK4 (phospho T214) + MARK2 (phospho T208) + MARK3 (phospho T234) + MARK1 (phospho T215) antibody [EPR5463] (ab126731)

Indirect ELISA antibody dose-response curve using ab126731 between 0-10000 ng/ml. Antigen concentration of 500 ng/mL. An alkaline phosphatase-conjugated goat anti-rabbit IgG (H+L) (1/2500) was used as the secondary antibody.



Dot Blot - Anti-MARK4 (phospho T214) + MARK2 (phospho T208) + MARK3 (phospho T234) + MARK1 (phospho T215) antibody [EPR5463] (ab126731)

Dot Blot using ab126731 at a 1/1000 dilution and Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated (**ab97051**) at a 1/100000 dilution

Lane 1: Human MARK1 (T215) phospho peptide

Lane 2: Human MARK1 non-phospho peptide

Lane 3: Human MARK2 (T208) phospho peptide

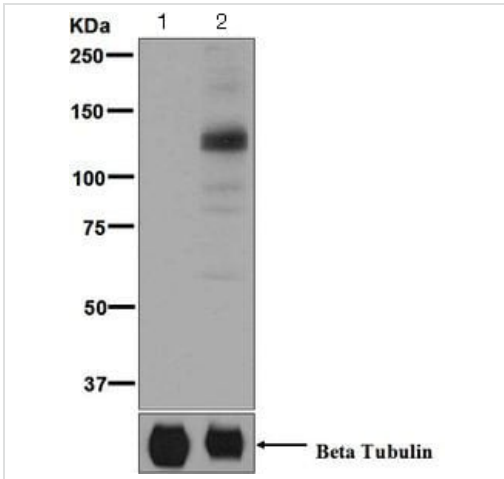
Lane 4: Human MARK2 non-phospho peptide

Lane 5: Human MARK3 (T234) phospho peptide

Lane 6: Human MARK3 non-phospho peptide

Lane 7: Human MARK4 (T214) phospho peptide

Lane 8: Human MARK4 non-phospho peptide



Western blot - Anti-MARK4 (phospho T214) + MARK2 (phospho T208) + MARK3 (phospho T234) + MARK1 (phospho T215) antibody [EPR5463] (ab126731)

All lanes : Anti-MARK4 (phospho T214) + MARK2 (phospho T208) + MARK3 (phospho T234) + MARK1 (phospho T215) antib (ab126731) at 1/10000 dilution

Lane 1 : SH-SY5Y cell lysate, untreated

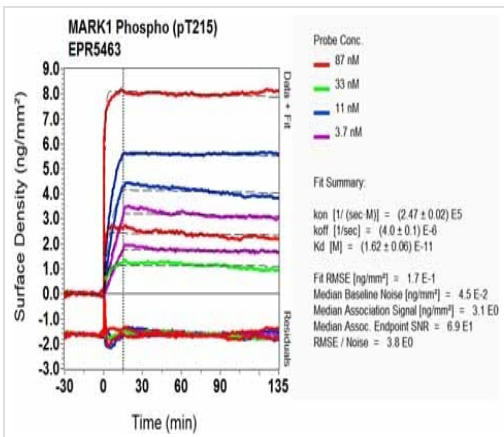
Lane 2 : SH-SY5Y cell lysate, treated with Okadaic acid and Calyculin A

Lysates/proteins at 10 µg per lane.

Secondary

All lanes : HRP labelled goat anti-rabbit at 1/2000 dilution

Predicted band size: 89 kDa



OI-RD Scanning - Anti-MARK4 (phospho T214) + MARK2 (phospho T208) + MARK3 (phospho T234) + MARK1 (phospho T215) antibody [EPR5463] (ab126731)

Equilibrium dissociation constant (K_D)

Learn more about K_D

[Click here to learn more about \$K_D\$](#)

Why choose a recombinant antibody?



Research with confidence
Consistent and reproducible results



Long-term and scalable supply
Recombinant technology



Success from the first experiment
Confirmed specificity



Ethical standards compliant
Animal-free production

Anti-MARK4 (phospho T214) + MARK2 (phospho T208) + MARK3 (phospho T234) + MARK1 (phospho T215) antibody [EPR5463] (ab126731)

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