


Product datasheet

Anti-GSK3 beta antibody [1F7] ab45760

1 Image

Overview

Product name	Anti-GSK3 beta antibody [1F7]
Description	Mouse monoclonal [1F7] to GSK3 beta
Tested applications	Suitable for: ELISA, WB
Species reactivity	Reacts with: Human Predicted to work with: Rat, Cow, Dog, Chimpanzee 
Immunogen	Recombinant fragment: DELRDPNVKL PNGRDTPAL F NFFTQELS SN PPLATIL IPP HARIQA AAST PTNAT AASDA NTGD RGQTNN AAS ASASNST , corresponding to amino acids 341-420 of Human GSK3 beta Run BLAST with ExPASy Run BLAST with NCBI
Positive control	HeLa cell lysates.

Properties

Form	Liquid
Storage instructions	Shipped at 4°C. Store at +4°C short term (1-2 weeks). Upon delivery aliquot. Store at -20°C or -80°C. Avoid freeze / thaw cycle.
Storage buffer	Preservative: 0.1% Sodium Azide Constituents: PBS, pH 7.4
Purity	Protein G purified
Purification notes	ab45760 was purified from mouse ascitic fluids.
Clonality	Monoclonal
Clone number	1F7
Myeloma	Sp2/0
Isotype	IgG1
Light chain type	kappa

Applications

Our [Abpromise guarantee](#) covers the use of **ab45760** 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
ELISA		Use at an assay dependent dilution.
WB		1/1000 - 1/2000. Detects a band of approximately 47 kDa (predicted molecular weight: 47 kDa).

Target

Function

Participates in the Wnt signaling pathway. Implicated in the hormonal control of several regulatory proteins including glycogen synthase, MYB and the transcription factor JUN. Phosphorylates JUN at sites proximal to its DNA-binding domain, thereby reducing its affinity for DNA. Phosphorylates MUC1 in breast cancer cells, and decreases the interaction of MUC1 with CTNNB1/beta-catenin. Phosphorylates CTNNB1/beta-catenin. Phosphorylates SNAI1. Plays an important role in ERBB2-dependent stabilization of microtubules at the cell cortex. Prevents the phosphorylation of APC and CLASP2, allowing its association with the cell membrane. In turn, membrane-bound APC allows the localization of MACF1 to the cell membrane, which is required for microtubule capture and stabilization. Phosphorylates MACF1 and this phosphorylation inhibits the binding of MACF1 to microtubules which is critical for its role in bulge stem cell migration and skin wound repair.

Tissue specificity

Expressed in testis, thymus, prostate and ovary and weakly expressed in lung, brain and kidney.

Sequence similarities

Belongs to the protein kinase superfamily. CMGC Ser/Thr protein kinase family. GSK-3 subfamily.
Contains 1 protein kinase domain.

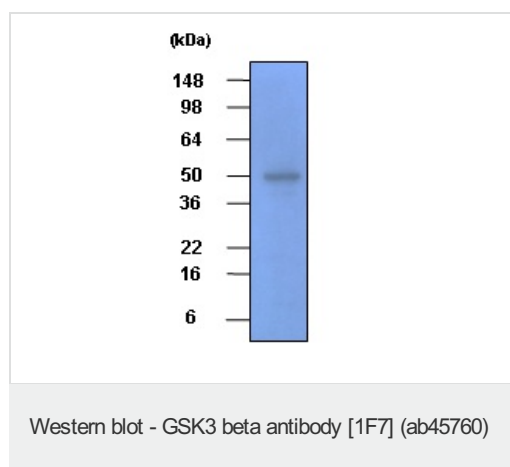
Post-translational modifications

Phosphorylated by AKT1 and ILK1. Activated by phosphorylation at Tyr-216.

Cellular localization

Cytoplasm. Nucleus. Cell membrane. The phosphorylated form shows localization to cytoplasm and cell membrane. The MEMO1-RHOA-DIAPH1 signaling pathway controls localization of the phosphorylated form to the cell membrane.

Images



Anti-GSK3 beta antibody [1F7] (ab45760) at
1/2000 dilution + HeLa cell lysate at 30 µg

Secondary

goat anti-mouse-HRP
Developed using the ECL technique

Predicted band size : 47 kDa

Observed band size : 47 kDa

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