

U-Blot[®] Smad2 (phospho S255) Rabbit mAb (WT9109)

User Manual

General Information

Product name	U-Blot [®] Smad2 (phospho S255) Rabbit mAb
Product No.	WT9109
Clonality	Recombinant monoclonal
Clone Number	W-R77
Alternative name	MADH2, MADR2

Key Features

Target	Phospho-Smad2 (Ser255)
Reactivity	Human
Applications	WB
MW(Calculated)	52 kDa
MW(Observed)	58 kDa
Host Species	Rabbit
Isotype	IgG
Conjugate	Unconjugated
Modification	Phosphorylation
Modification Site	Ser255
Purification	Protein A affinity purification
Immunogen	Polypeptide
Specificity	Specific for Smad2 only when phosphorylated at Ser255

Storage Information

Storage	Store at -20°C. Avoid repeated freeze-thaw cycles
Stability	Stable for 12 months from date of receipt / reconstitution.
Formulation	PBS, Glycerol, BSA

Product Usage Information

Applications	Dilution	Recommended Species
WB	1:1000	Human

Target Information

Gene name SMAD2

Protein name Mothers against decapentaplegic homolog 2

Organism Human

Gene ID 4087

SwissProt Q15796

SMAD2, also named as MADH2 and MADR2, belongs to the dwarfin/SMAD family, contains 1 MH1 (MAD homology 1) domain and 1 MH2 (MAD homology 2) domain. SMAD2 is a receptor-regulated SMAD(R-SMAD) that is an intracellular signal transducer and transcriptional modulator activated by TGF-beta (transforming growth factor) and activin type 1 receptor kinases. This protein may act as a tumor suppressor in colorectal carcinoma. It is phosphorylated on one or several of Thr-220, Ser-245, Ser-250, and Ser-255. In response to TGF-beta, It is phosphorylated on Ser-465/467 by TGF-beta and activin type 1 receptor kinases, and then able to interact with SMURF2, recruiting other proteins, such as SNON, for degradation. In response to decorin, the naturally occurring inhibitor of TGF-beta signaling, it is phosphorylated on Ser-240 by CaMK2. It is phosphorylated by MAPK3 upon EGF stimulation; which increases transcriptional activity and stability, and is blocked by calmodulin.

Background

Cellular Localization Cytoplasm,Nucleus

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