

Recombinant

DGRmAb®

**Smad2 (DGR13182) Rabbit mAb**

db15633

Package : 10µL 20µL 50µL 100µL

**Product Name** : Smad2 (DGR13182) Rabbit mAb**Cat.No.:** db15633**Synonyms** : JV18; MADH2; MADR2; JV18-1; hMAD-2; hSMAD2**Application** : WB, ICC/IF, FC**Reactivity** : Human,Mouse,Rat**Host species** : Rabbit**Background**

The protein encoded by this gene belongs to the SMAD, a family of proteins similar to the gene products of the Drosophila gene 'mothers against decapentaplegic' (Mad) and the C. elegans gene Sma. SMAD proteins are signal transducers and transcriptional modulators that mediate multiple signaling pathways. This protein mediates the signal of the transforming growth factor (TGF)-beta, and thus regulates multiple cellular processes, such as cell proliferation, apoptosis, and differentiation. This protein is recruited to the TGF-beta receptors through its interaction with the SMAD anchor for receptor activation (SARA) protein. In response to TGF-beta signal, this protein is phosphorylated by the TGF-beta receptors. The phosphorylation induces the dissociation of this protein with SARA and the association with the family member SMAD4. The association with SMAD4 is important for the translocation of this protein into the nucleus, where it binds to target promoters and forms a transcription repressor complex with other cofactors. This protein can also be phosphorylated by activin type 1 receptor kinase, and mediates the signal from the activin. Alternatively spliced transcript variants have been observed for this gene. [provided by RefSeq, May 2012]

**Immunogen**

A synthetic peptide of human Smad2

**Gene ID**

4087

**Swiss Prot**

Q15796

**Synonyms**

JV18; MADH2; MADR2; JV18-1; hMAD-2; hSMAD2

**Reactivity**

Human,Mouse,Rat

**Application**

WB, ICC/IF, FC

**Recommended dilution**

WB: 1:1000

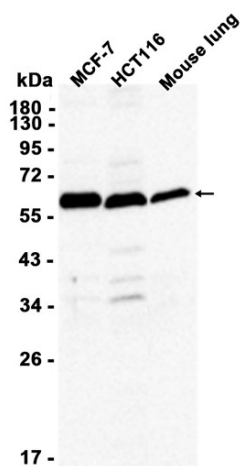
ICC/IF: 1:100-1:200

FC: 1:100

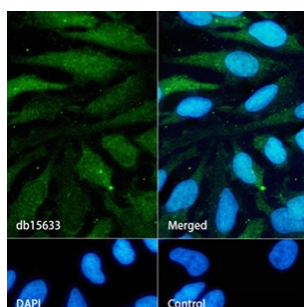
**Calculated MW**

52 kDa

<b>Observed MW</b>	52 kDa
<b>Host species</b>	Rabbit
<b>Clonality</b>	Monoclonal
<b>Clonality No.</b>	DGR13182
<b>Isotype</b>	IgG
<b>Purity</b>	Affinity Purification
<b>Conjugation</b>	Un-conjugated
<b>Storage Stability</b>	Store at -20°C. Supplied in 50mM Tris-Glycine(pH 7.4), 0.15M NaCl, 40% Glycerol, 0.01% sodium azide and 0.05% BSA. Stable for 12 months from date of receipt.



Western blot analysis of extracts from MCF-7, HCT116 cells and Mouse lung tissue using db15633 at 1:1000.



Immunofluorescence analysis of HeLa cells labelling Smad2 with db15633.

The cells were fixed with cold 100% methanol (10min, 4°C) and blocked in 1% BSA/10% normal goat serum/0.3M glycine in 0.1% PBS-Tween 20 for 1h. The cells were then incubate with db15633 (1:50) at room temprature for 1h, followed by a further incubation at room temperature for 45min with Goat Anti Rabbit IgG (H+L)-AF488 (db10005, shown in green). Nuclear DNA was labeled in blue with DAPI.

Control: Secondary antibody only.