

Anti-SMAD4 antibody (320-552) [S3MR] (STJ11101653)

GENERAL INFORMATION

Product Type	Primary antibodies
Applications	WB/IHC-P/IP/ELISA/ChIP/CUT&Tag
Host / Source	Rabbit
Reactivity	Human/Mouse/Rat

PRODUCT PROPERTIES

Clonality	Monoclonal
Concentration	Lot specific
Conjugation	Unconjugated
Purification	Affinity purification
Dilution Range	WB:1:1000-1:6000 IHC-P:1:500-1:2000 IP:0.5 Mu g-4 Mu g antibody for 200 Mu g-400 Mu g extracts of whole cells ELISA:Recommended starting concentration is 1 Mu g/mL. Please optimize the concentration based on your specific assay requiremen
Formulation	PBS with 0.05% Proclin300, 0.05% BSA, 50% Glycerol, pH 7.3.
Isotype	IgG
Molecular Weight	Protein Mw: 60kDa Observed Mw: 70kDa/
Storage Instruction	Store at -20°C for up to 1 year from the date of receipt, and avoid repeat freeze-thaw cycles.

TARGET INFORMATION

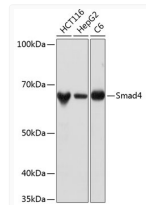
Gene ID	4089
Gene Symbol	SMAD4
UniProt ID	SMAD4_HUMAN
Immunogen Region	320-552
Immunogen Sequence	PEYWC ^{SI} AYFEMDVQVGETF KVPSSCPIVTV ^{DG} YVDPSGG DRFC ^{LQ} LSNVHRTEAIERA RLHIGKGV ^Q LECKGEGD ^{VW} RCLSDHAVFV ^Q SYLDREAG RAPGD ^{AV} HKIYPSAYIKVFD LRQCHR ^{MQ} QQQAATAQAAAA AQAAAVAGNIPGPGSVGGIA PAISLSAAAGIGVDDLRRLLC ILRMSFVKGWGPDPYRQSIK ETPCWIEIHLH ^{RAL} QLLLDEV LHTMPIADPQPLD
Specificity	Recombinant fusion protein containing a sequence corresponding to amino acids 320-552 of human Smad4 (NP_005350.1).

ADDITIONAL INFORMATION

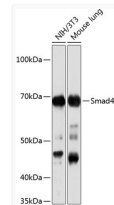
Note STRICTLY FOR FURTHER SCIENTIFIC RESEARCH USE ONLY (RUO). MUST NOT TO BE USED IN DIAGNOSTIC OR THERAPEUTIC APPLICATIONS.



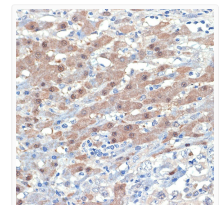
CUT&Tag was performed using the CUT&Tag Assay Kit (pAG-Tn5) for Illumina (RK20265) from 10⁵ K562 cells with 1 Mu g Smad4 rabbit monoclonal antibody (STJ11101653), along with a Goat Anti-rabbit IgG (H+L). The CUT&Tag results indicate the enrichment pattern of Smad4 in representative gene loci (JUNB), as shown in figure.



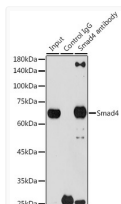
Western blot analysis of extracts of various cell lines, using Smad4 antibody (STJ11101653) at 1:1000 dilution. Secondary antibody: HRP Goat Anti-rabbit IgG (H+L) (STJS000856) at 1:10000 dilution. Lysates/proteins: 25 Mu g per lane. Blocking buffer: 3% non-fat dry milk in TBST. Detection: ECL Basic Kit. Exposure time: 10s.



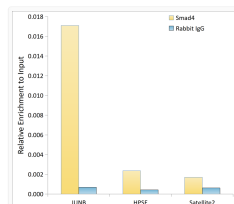
Western blot analysis of extracts of various cell lines, using Smad4 antibody (STJ11101653) at 1:1000 dilution. Secondary antibody: HRP Goat Anti-rabbit IgG (H+L) (STJS000856) at 1:10000 dilution. Lysates/proteins: 25 Mu g per lane. Blocking buffer: 3% non-fat dry milk in TBST. Detection: ECL Basic Kit. Exposure time: 3min.



Immunohistochemistry analysis of paraffin-embedded human liver cancer using [KO Validated] Smad4 rabbit monoclonal antibody (STJ11101653) at dilution of 1:100 (40x lens). Perform microwave antigen retrieval with 10 mM Tris/EDTA buffer pH 9.0 before commencing with immunohistochemistry staining protocol.



Immunoprecipitation analysis of 300 Mu g extracts of 293T cells using 3 Mu g Smad4 antibody (STJ11101653). Western blot was performed from the immunoprecipitate using Smad4 antibody (STJ11101653) at a dilution of 1:1000.



Chromatin immunoprecipitation analysis of extracts of HepG2 cells, using [KO Validated] Smad4 rabbit monoclonal antibody (STJ11101653) and rabbit IgG. The amount of immunoprecipitated DNA was checked by quantitative PCR. Histogram was constructed by the ratios of the immunoprecipitated DNA to the input.