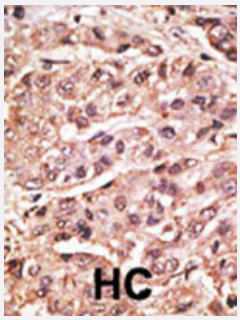
SUMO4 polyclonal antibody

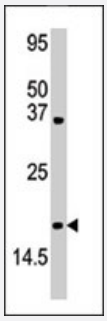
Catalog # PAB2430 Size 400 uL

Applications



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections)

Formalin-fixed and paraffin-embedded human hepatocellular carcinoma tissue reacted with the SUMO4 polyclonal antibody (Cat # PAB2430) , which was peroxidase-conjugated to the secondary antibody, followed by DAB staining. This data demonstrates the use of this antibody for immunohistochemistry ; clinical relevance has not been evaluated. HC = hepatocarcinoma.



Western Blot (Cell lysate)

Western blot analysis of SUMO4 polyclonal antibody (Cat # PAB2430) in HepG2 cell line lysate (35 ug/lane). SUMO4 mutant (arrow) was detected using the purified polyclonal antibody.

Specification

Product Description	Rabbit polyclonal antibody raised against synthetic peptide of SUMO4 (V55 Mutant).
Immunogen	A synthetic peptide (conjugated with KLH) corresponding to human SUMO4 (V55 Mutant).
Sequence	CEPRGLS(V)KQIRFRFG
Host	Rabbit
Reactivity	Human
Specificity	SUMO4 (V55 Mutant)
Form	Liquid

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Purification	Ammonium sulfate precipitation
Recommend Usage	Western Blot (1:1000) Immunohistochemistry (1:50-100) The optimal working dilution should be determined by the end user.
Storage Buffer	In PBS (0.09% sodium azide)
Storage Instruction	Store at 4°C. For long term storage store at -20°C. Aliquot to avoid repeated freezing and thawing.
Note	This product contains sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which shoul d be handled by trained staff only.

Applications

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Gene Info — SUMO4

Entrez GeneID	387082
Protein Accession#	Q6EEV6
Gene Name	SUMO4
Gene Alias	IDDM5, SMT3H4, SUMO-4, dJ281H8.4
Gene Description	SMT3 suppressor of mif two 3 homolog 4 (S. cerevisiae)
Omim ID	600320 608829
Gene Ontology	Hyperlink

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Gene Summary	This gene is a member of the SUMO gene family. This family of genes encode small ubiquitin-related modifiers that are attached to proteins and control the target proteins' subcellular localization, stability, or activity. The protein described in this record is located in the cytoplasm and specifically modifies IKBA, leading to negative regulation of NF-kappa-B-dependent transcription of the IL12B gene. A specific polymorphism in this SUMO gene, which leads to the M55V substitution, has been associated with type I diabetes. The RefSeq contains this polymorphism. [provided by RefSeq
Other Designations	OTTHUMP00000017390|SMT3 suppressor of mif two 3 homolog 2|SMT3 suppressor of mif two 3 homolog 4|small ubiquitin-like modifier 4 protein|small ubiquitin-like protein 4

Publication Reference

- Assessing the validity of the association between the SUMO4 M55V variant and risk of type 1 diabetes.

  Park Y, Park S, Kang J, Yang S, Kim D.

  Nature Genetics 2005 Feb; 37(2):112.

- A functional variant of SUMO4, a new I kappa B alpha modifier, is associated with type 1 diabetes.

  Guo D, Li M, Zhang Y, Yang P, Eckenrode S, Hopkins D, Zheng W, Purohit S, Podolsky RH, Muir A, Wang J, Dong Z, Brusko T, Atkinson M, Pozzilli P, Zeidler A, Raffel LJ, Jacob CO, Park Y, Serrano-Rios M, Larrad MT, Zhang Z, Garchon HJ, Bach JF, Rotter JI, She JX, Wang CY.

  Nature Genetics 2004 Jul; 36(8):837.

- A M55V polymorphism in a novel SUMO gene (SUMO-4) differentially activates heat shock transcription factors and is associated with susceptibility to type I diabetes mellitus.

  Bohren KM, Nadkarni V, Song JH, Gabbay KH, Owerbach D.

  The Journal of Biological Chemistry 2004 Apr; 279(26):27233.

  Application: WB-Tr, Human, HepG2 cells

Disease

- Addison Disease
- Arthritis
- Autoimmune Diseases
- Behcet Syndrome
- Coronary Disease
- Diabetes

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- Diabetes Mellitus
- Diabetic Angiopathies
- Diabetic Nephropathies
- Diabetic Neuropathies
- Diabetic Retinopathy
- Genetic Predisposition to Disease
- Graves Disease
- Lupus Erythematosus
- Psoriasis
- Thyroiditis
- Uveomeningoencephalitic Syndrome

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