

# Product Datasheet

## HES-1 Antibody (OT14H1) NBP1-47791

Unit Size: 0.1 ml

Store at -20C. Avoid freeze-thaw cycles.

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**NBP1-47791**

HES-1 Antibody (OTI4H1)

Product Information	
Unit Size	0.1 ml
Concentration	1 mg/ml
Storage	Store at -20C. Avoid freeze-thaw cycles.
Clonality	Monoclonal
Clone	OTI4H1
Preservative	0.02% Sodium Azide
Isotype	IgG1
Purity	Immunogen affinity purified
Buffer	PBS (pH 7.3), 1.0% BSA and 50% Glycerol
Target Molecular Weight	29.4 kDa

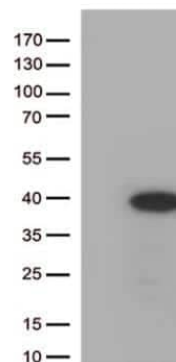
Product Description	
Description	Novus Biologicals Mouse HES-1 Antibody (OTI4H1) (NBP1-47791) is a monoclonal antibody validated for use in IHC, WB, ICC/IF and ChIP. Anti-HES-1 Antibody: Cited in 9 publications. All Novus Biologicals antibodies are covered by our 100% guarantee.
Host	Mouse
Gene ID	3280
Gene Symbol	HES1
Species	Human, Mouse, Rat
Reactivity Notes	Please note that this antibody is reactive to Mouse and derived from the same host, Mouse. Mouse-On-Mouse blocking reagent may be needed for IHC and ICC experiments to reduce high background signal. You can find these reagents under catalog numbers PK-2200-NB and MP-2400-NB. Please contact Technical Support if you have any questions.
Specificity/Sensitivity	This antibody is specific for Homo sapiens hairy and enhancer of split 1, (Drosophila) (HES1).
Immunogen	Recombinant protein expressed in E.coli corresponding to amino acids 1-280 of human HES1

Product Application Details	
Applications	Western Blot, Immunohistochemistry-Paraffin, Immunocytochemistry/Immunofluorescence, Immunohistochemistry, Chromatin Immunoprecipitation (ChIP)
Recommended Dilutions	Western Blot 1:1000, Immunohistochemistry 1:50, Immunocytochemistry/Immunofluorescence 1:100, Immunohistochemistry-Paraffin 1:50, Chromatin Immunoprecipitation (ChIP) Reactivity reported in (PMID: 29048612)

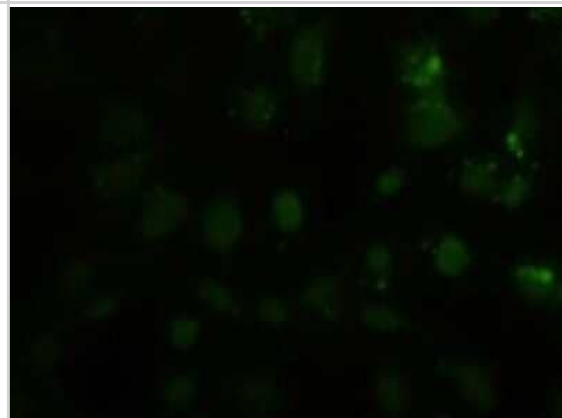


## Images

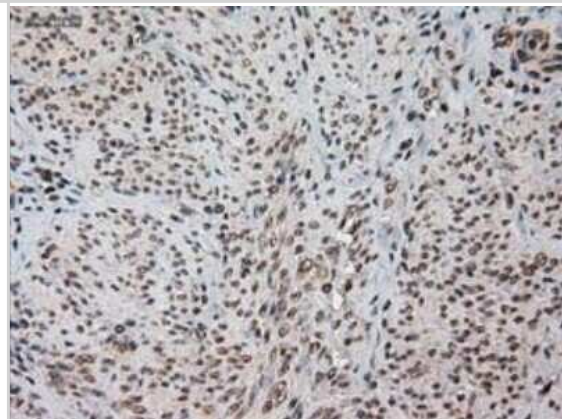
Western Blot: HES-1 Antibody (OTI4H1) [NBP1-47791] - HEK293T cells were transfected with the pCMV6-ENTRY control (Left lane) or pCMV6-ENTRY HES1 (Right lane) cDNA for 48 hrs and lysed. Equivalent amounts of cell lysates (5 ug per lane) were separated by SDS-PAGE and immunoblotted with anti-HES1 (1:500).



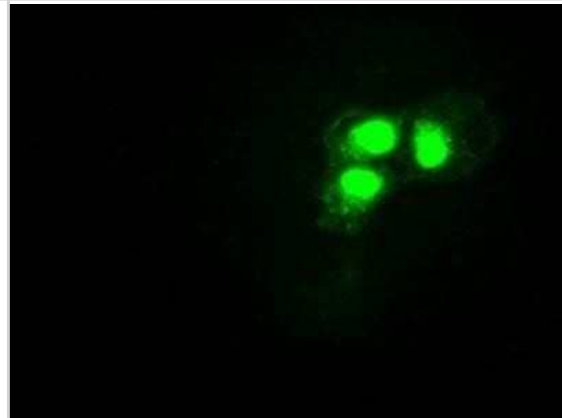
Immunocytochemistry/Immunofluorescence: HES-1 Antibody (OTI4H1) [NBP1-47791] - HeLa cells using anti-HES1 mouse monoclonal antibody.



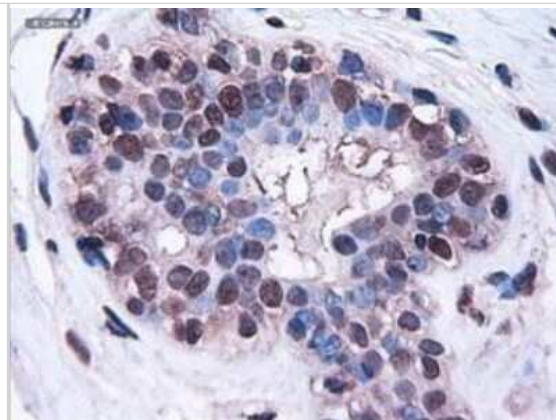
Immunohistochemistry-Paraffin: HES-1 Antibody (OTI4H1) [NBP1-47791] - Staining of paraffin-embedded liver using anti-Hes1 mouse monoclonal antibody.



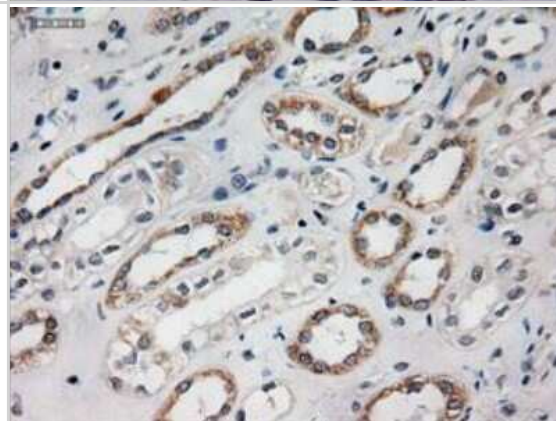
Immunocytochemistry/Immunofluorescence: HES-1 Antibody (OTI4H1) [NBP1-47791] - Staining of COS7 cells transiently transfected by pCMV6-ENTRY Hes1.



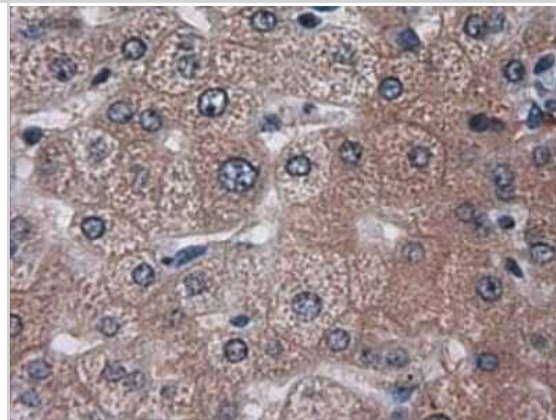
Immunohistochemistry-Paraffin: HES-1 Antibody (OT14H1) [NBP1-47791] - Staining of paraffin-embedded breast using anti-Hes1 mouse monoclonal antibody.



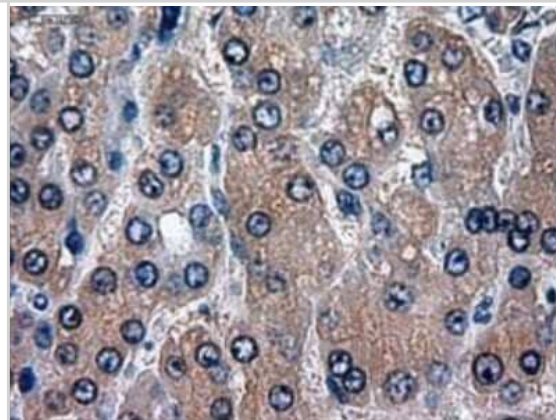
Immunohistochemistry-Paraffin: HES-1 Antibody (OT14H1) [NBP1-47791] - Staining of paraffin-embedded Carcinoma of liver using anti-Hes1 mouse monoclonal antibody.



Immunohistochemistry-Paraffin: HES-1 Antibody (OT14H1) [NBP1-47791] - Staining of paraffin-embedded endometrium using anti-Hes1 mouse monoclonal antibody.



Immunohistochemistry-Paraffin: HES-1 Antibody (OT14H1) [NBP1-47791] - Staining of paraffin-embedded kidney using anti-Hes1 mouse monoclonal antibody.



## Publications

Zhu A, Ma Z, Wolff E et al. HES1 regulates bone marrow mesenchymal stromal cell function by suppressing NFATc2-mediated inflammation. *Haematologica* 2025-10-02 [PMID: 41035406]

Kim MS, Kang H, Baek JH et Al. Disrupting Notch signaling related HES1 in myeloid cells reinvigorates antitumor T cell responses *Exp Hematol Oncol* 2024-12-19 [PMID: 39702544]

Wen T, Duan Y, Gao D et al. miR-342-5p promotes vascular smooth muscle cell phenotypic transition through a negative-feedback regulation of Notch signaling via targeting FOXO3 *Life sciences* 2023-06-01 [PMID: 37270171] (Western Blot, Mouse)

Details:  
WB 1:1000

Abe T, Uosaki H, Shibata H, et al. Fetal sheep support the development of hematopoietic cells in vivo from human induced pluripotent stem cells *Experimental hematology* 2021-01-01 [PMID: 33395577] (IF/IHC, Human)

Kim TH, Jeong JY, Park JY, Kim SW et al. miR-150 enhances apoptotic and anti-tumor effects of paclitaxel in paclitaxel-resistant ovarian cancer cells by targeting Notch3 *Oncotarget* 2017-09-22 [PMID: 29069826] (WB, Human)

Liao B, Zhou H, Liang H, Li C. Regulation of ERK and AKT pathways by hepatitis B virus X protein via the Notch1 pathway in hepatocellular carcinoma. *Int. J. Oncol.* 2017-11-01 [PMID: 29048612] (Chemotaxis, Human)

Jeong JY, Kang H, Kim TH et al. MicroRNA-136 inhibits cancer stem cell activity and enhances the anti-tumor effect of paclitaxel against chemoresistant ovarian cancer cells by targeting Notch3. *Cancer Lett.* 2016-11-22 [PMID: 27887917] (WB, Human)

Wang CY, Wei Q, Han I et al. Hedgehog and Notch signaling regulate self-renewal of undifferentiated pleomorphic sarcomas. *Cancer Res* 2012-02-15 [PMID: 22232736]

Chiou HY, Liu SY, Lin CH, Lee EH. Hes-1 SUMOylation by protein inhibitor of activated STAT1 enhances the suppressing effect of Hes-1 on GADD45a expression to increase cell survival *J. Biomed. Sci.* 2014-06-26 [PMID: 24894488] (Chemotaxis, Human)

Details:  
Hes1 antibody used for Chromatin Immunoprecipitation /ChIP assay in transfected HEK293T cells - nuclear chromatin incubated Hes-1 antibody 4.8 ug or mouse IgG or Flag-M2 , 4C ON, immunoprecipitates collected on magnesium beads (1-2 h 4C), immunoprecipitates washed and de-crosslinked, chromatin processed for quantitative PCR analysis (Figure 6B).

Maraver A, Fernandez-Marcos PJ, Herranz D et al. Therapeutic Effect of Secretase Inhibition in Kras(G12V)-Driven Non-Small Cell Lung Carcinoma by Derepression of DUSP1 and Inhibition of ERK *Cancer Cell* 2012-08-14 [PMID: 22897852] (Chemotaxis, Human)



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### **Products Related to NBP1-47791**

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NBP2-33376H	Blue Marker Antibody (6F4-F6) [HRP]
HAF007	Goat anti-Mouse IgG Secondary Antibody [HRP]
NB7539	Goat anti-Mouse IgG (H+L) Secondary Antibody [HRP]
NBP1-97005-0.5mg	Mouse IgG1 Isotype Control (MG1)

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### **Limitations**

This product is for research use only and is not approved for use in humans or in clinical diagnosis. Primary Antibodies are guaranteed for 1 year from date of receipt.

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