

HES1

CONTACT INFORMATION:	Monoclonal Antibodies Unit. Centro Nacional de Investigaciones Oncológicas
STATUS:	Validated
TYPE:	Rat monoclonal
CLONE NAME:	HS395A
PROTEIN:	Transcription factor HES-1 - Hairy and Enhancer of split-1
PROTEIN WEB:	https://www.uniprot.org/uniprot/P35428
ANTIGEN USED:	HIS-mHES1 (aa93-aa282 fragment)
FUSION PARTNER:	myeloma p3-NS1/Ag4-1 (NS1) cells
ISOTYPE:	IgG2b
SPECIES REACTIVITY:	Mouse and human
PREPARATION AND STORAGE:	Aliquot and store at 4C. Do not freeze

DESCRIPTION

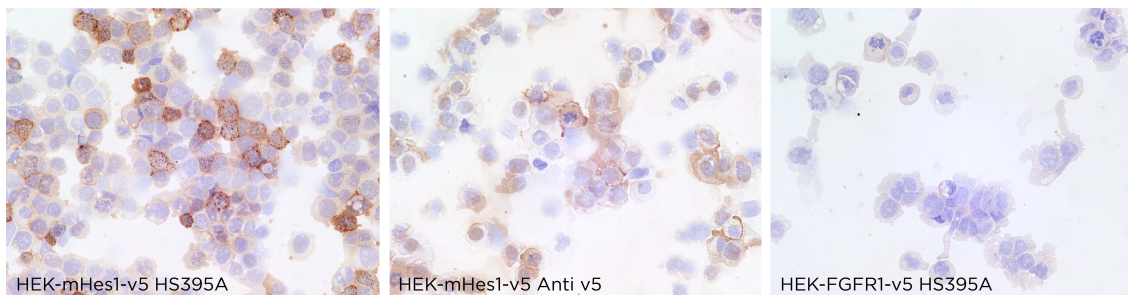
Transcriptional repressor of genes that require a bHLH protein for their transcription. May act as a negative regulator of myogenesis by inhibiting the functions of MYOD1 and ASH1 (By similarity). Binds DNA on N-box motifs: 5'-CACNAG-3' with high affinity and on E-box motifs: 5'-CANNTG-3' with low affinity. May play a role in a functional FA core complex response to DNA cross-link damage, being required for the stability and nuclear localization of FA core complex proteins, as well as for FANCD2 monoubiquitination in response to DNA damage.

REFERENCES

Maraver A, Fernandez-Marcos PJ, Cash TP, Mendez-Pertuz M, Dueñas M, Maietta P, Martinelli P, Muñoz-Martin M, Martínez-Fernández M, Cañamero M, Roncador G, Martinez-Torrecuadrada JL, Grivas D, de la Pompa JL, Valencia A, Paramio JM, Real FX, Serrano M. NOTCH pathway inactivation promotes bladder cancer progression. J Clin Invest. 2015 Feb;125(2):824-30.

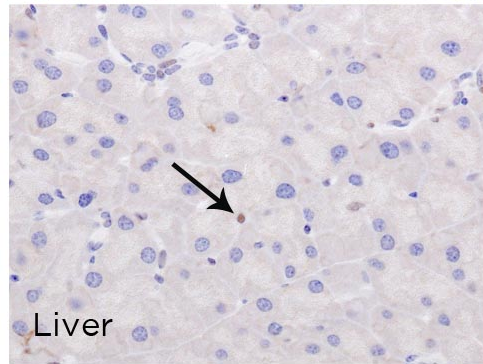
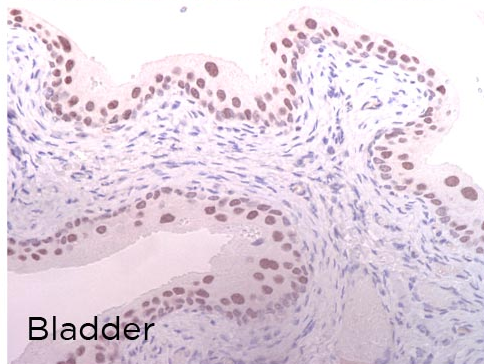
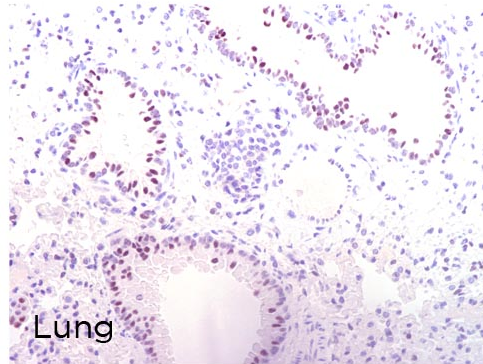
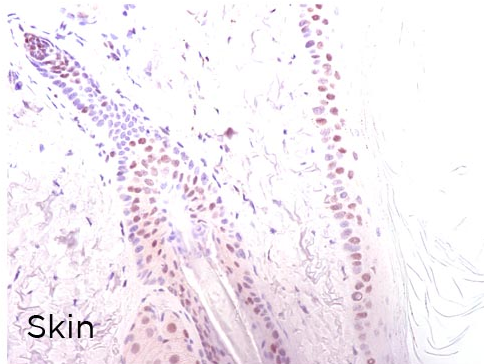
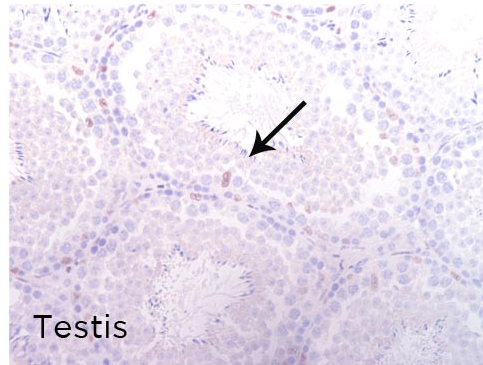
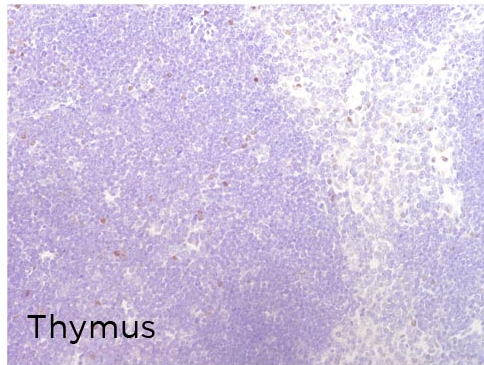
APPLICATIONS

IHC Techniques	Clone	Dilution	Antibody concentration	Antigen retrieval method	Visualization kit	Positive control	Negative control	Protein localization	Positivity in other species
Frozen tissue and cytopins									
Recommended	HS395 A	Neat	supernatant						
Paraffin tissue									
Recommended	HS395 A	Neat	supernatant						
Immunofluorescence									
Recommended	HS395 A	1:50	purified						

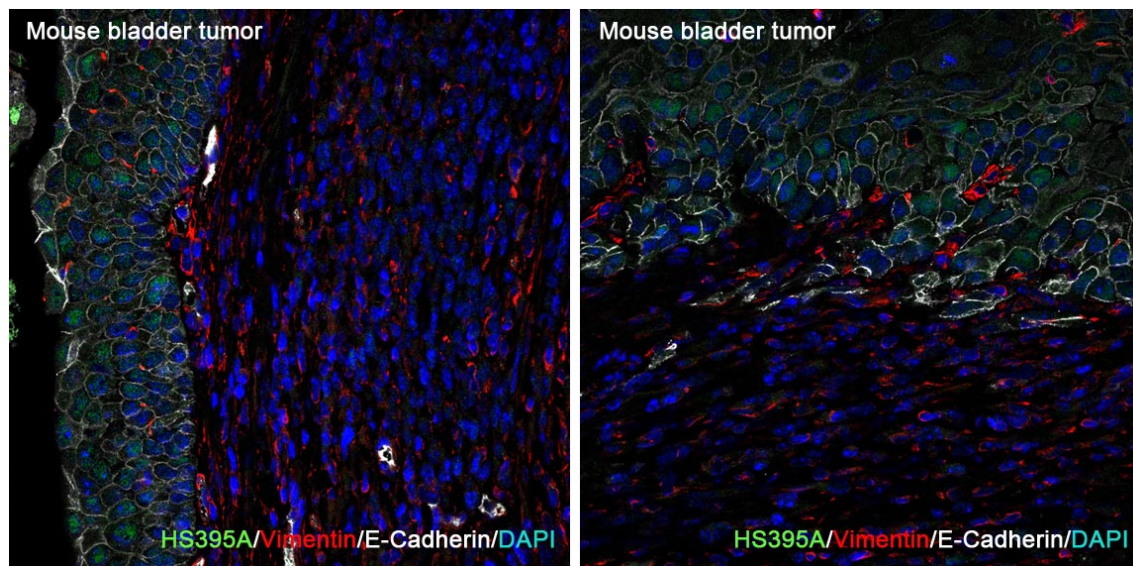


HS395A is able to detect mouse Hes1 protein in immunocytochemistry

To confirm that HS395A mAb recognizes mouse HES1 protein, immunohistochemistry on frozen cytopins preparations of V5-tagged mHES1 expressed in HEK293T cell line was performed. Anti-V5 antibody was used as positive control. HEK-FGFR1-v5 were used as a negative control.



HS395A mAb can be used to detect Hes1 protein in mouse paraffin tissues



HS395A mAb can be used to detect mouse Hes1 protein by immunofluorescence