HIF1A

CONTACT INFORMATION: Monoclonal Antibodies Unit. Centro Nacional de Investigaciones Oncológicas

STATUS: Validated

TYPE: Rat monoclonal

CLONE NAME: SIMA343B

PROTEIN: Hypoxia-inducible factor 1-alpha

PROTEIN WEB: https://www.uniprot.org/uniprot/Q16665
ANTIGEN USED: mouse HIS-HIF1a (fragment 530-825)

FUSION PARTNER: NS1/Ag4-1 (NS1) cells

ISOTYPE: IgG2a

SPECIES REACTIVITY: human and mouse

PREPARATION AND STORAGE: Aliquot and store at 4C. Do not freeze

DESCRIPTION

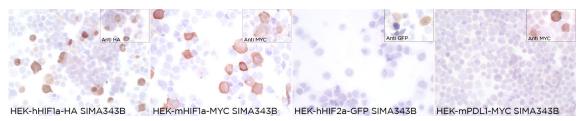
Functions as a master transcriptional regulator of the adaptive response to hypoxia. Under hypoxic conditions, activates the transcription of over 40 genes, including erythropoietin, glucose transporters, glycolytic enzymes, vascular endothelial growth factor, HILPDA, and other genes whose protein products increase oxygen delivery or facilitate metabolic adaptation to hypoxia. Plays an essential role in embryonic vascularization, tumor angiogenesis and pathophysiology of ischemic disease.

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 cytospins									
Recommended	SIMA3	Neat	supernatant						
	43B								
Paraffin tissue									

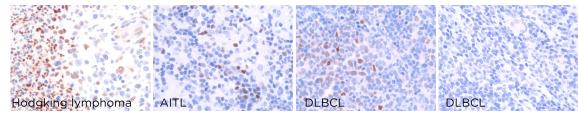
Monoclonal Antibodies Catalogue

Recommended	SIMA3 43B	Neat	supernatant			Placenta	Liver		
Immunofluorescence									



SIMA343B mAb is able to detect human and mouse HIF1a protein in immunocytochemistry

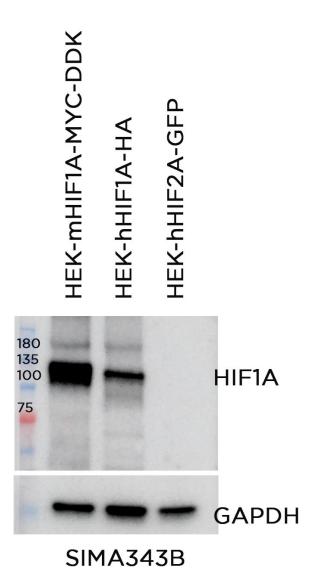
To confirm that SIMA343B mAb recognizes human and mouse HIF1a protein, immunocytochemistry on frozen cytospins preparation of human and mouse HIF1a and hHIF2a expressed in HEK293T was performed. Anti-MYC, anti-HA and anti GFP Abs were used as positive controls. Cytospin preparation of mouse PDL1 protein was used as negative control.



SIMA343B antibody can be used to detect human HIF1a protein in human paraffin tissues.

WB Techniques	Clone	Dilution	Antibody concentration	Positive control	Negative control	Expected MW	Observed Mw	Positivity in other species		
Western Blotting										
Recommended	SIMA343	Neat	supernatant			93kDa	>100kDa			
	В									

Immunoprecipitation



SIMA343B mAb is able to detect human Hif1a protein by WB (over-expression).

LANES

Lane 1 HEK-mouse HIF1A-MYC-DDK (10ug) (+)

Lane 2 HEK-human HIF1A-HA (10ug) (+)

Lane 3 HEK-human HIF2a-GFP (10ug) (-)