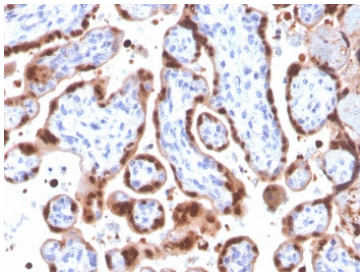
HIF1 alpha Antibody Ha111a / Mouse Monoclonal [clone Ha111a] (V8220)

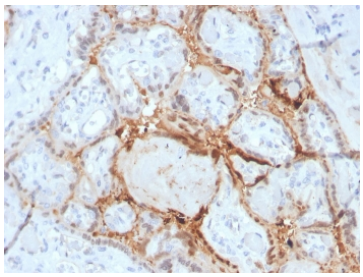
Catalog No.	Formulation	Size
V8220-100UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced) and 0.05% sodium azide	100 ug
V8220-20UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced) and 0.05% sodium azide	20 ug
V8220SAF-100UG	1 mg/ml in 1X PBS; BSA free, sodium azide free	100 ug

Bulk quote request

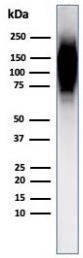
Availability	1-3 business days
Species Reactivity	Human
Format	Purified
Host	Mouse
Clonality	Monoclonal (mouse origin)
Isotype	Mouse IgG2a, kappa
Clone Name	Ha111a
Purity	Protein G affinity chromatography
UniProt	Q16665
Localization	Nuclear and cytoplasmic
Applications	ELISA (order Ab without BSA for coating) Western blot: 1-2ug/ml Immunohistochemistry (FFPE): 1-2ug/ml for 30 minutes at RT
Limitations	This HIF1 alpha Antibody Ha111a is available for research use only.



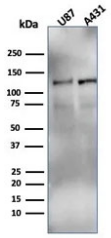
HIF1 alpha Antibody Ha111a Placenta Immunohistochemistry. IHC staining of FFPE human placenta with HIF1 alpha antibody (clone Ha111a). HIER: boil tissue sections in pH 9 10mM Tris with 1mM EDTA for 20 min and allow to cool before testing.



HIF1 alpha Antibody Ha111a Placental Tissue IHC. Immunohistochemistry staining of FFPE human placenta with HIF1 alpha antibody (clone Ha111a). HIER: boil tissue sections in pH 9 10mM Tris with 1mM EDTA for 20 min and allow to cool before testing.



HIF1 alpha Antibody Ha111a WB. Western blot testing of human spleen lysate with HIF1 alpha antibody (clone Ha111a).



Western blot testing of human U-87 MG and A431 cell lysate with recombinant HIF1 alpha antibody (clone Ha111a).

Description

HIF1 (hypoxia-inducible factor 1), a heterodimeric transcription factor complex central to cellular response to hypoxia, consists of two subunits (HIF-1 alpha and HIF-1 beta) which are basic helix-loop-helix proteins of the PAS (Per, ARNT, Sim) family. Expression of HIF-1 alpha protein is regulated by cellular oxygen level alterations as well as in oxygen-independent manner via different cytokines (through the PI3K-AKT-mTOR pathway), growth factors, oncogenic activation, or loss of tumor suppressor function etc. In normoxic cells, HIF-1 alpha is proline hydroxylated leading to a conformational change that promotes its binding to the VLH (von Hippel Lindau) protein E3 ligase complex; ubiquitination and followed by rapid proteasomal degradation. Hypoxia as well as chemical hydroxylase inhibitors (desferrioxamine, cobalt etc.) inhibit HIF-1 alpha degradation and lead to its accumulation in the cells, whereas, contrastingly, HIF-1 beta/ARNT (AhR nuclear translocator) remains stable under both conditions. Besides their critical role in hypoxic response, HIF1s regulates the transcription of genes responsible for angiogenesis, erythropoiesis/iron-metabolism, glucose metabolism, cell proliferation/survival, adipogenesis, carotid body formation, B lymphocyte development and immune reactions.

For additional information on hypoxia-inducible factor 1 alpha and complementary antibody validation, visit our HIF1A Antibody / HIF-1 alpha 31H88 page.

Application Notes

Optimal dilution of the HIF1 alpha Antibody Ha111a antibody should be determined by the researcher.

Immunogen

A portion of amino acids 239-530 from the human protein was used as the immunogen for the HIF1 alpha antibody.

Storage

Store the HIF1 alpha antibody at 2-8oC (with azide) or aliquot and store at -20oC or colder (without azide).

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