For Research Use Only

Cardinal Red™-conjugated HIF-1 alpha Polyclonal antibody



Catalog Number: CR-20960

Featured Product

Basic Information

Catalog Number: CR-20960 Size: 1000 µ g/ml

Rabbit Isotype:

Source:

Immunogen Catalog Number:

AG15198

GenBank Accession Number: BC012527

BC012527 GeneID (NCBI): 3091

UNIPROT ID: Q16665 Full Name:

120 kDa

hypoxia inducible factor 1, alpha subunit (basic helix-loop-helix transcription factor)

Calculated MW: 826 aa, 93 kDa Observed MW: Purification Method: Antigen affinity purification

Excitation/Emission maxima wavelengths: 592 nm / 611 nm

Applications

Tested Applications:

Species Specificity:

human

Background Information

HIF1a, the major regulator of the cellular responses to hypoxia, consists of an oxygen-sensitive subunit, HIF1 alpha (HIF1A), and an oxygen-insensitive subunit, HIF1 beta (arylhydrocarbon receptor nuclear transporter [ARNT]). Under normal oxygen conditions, HIF1a is continuously produced and destroyed, in a process involving hydroxylation, interaction with von Hippel-Lindau (VHL) protein, polyubiquitylation and subsequent proteasomal degradation. Under hypoxic conditions, hydroxylation is impaired and HIF1a is stabilized. HIF1a localizes in cytoplasm in normoxia, but it can translocate into nuclear in response to hypoxia. The calculated molecular weight of HIF1a is 93 kDa, but the modified protein HIF1a is about 110-120kDa (PMID: 11698256, .PMID: 7539918).

Storage

Storage

Store at -20°C. Avoid exposure to light. Stable for one year after shipment. Storage Buffer:

PBS with 50% Glycerol, 0.05% Proclin300, 0.5% BSA, pH 7.3.

Aliquoting is unnecessary for -20°C storage

Selected Validation Data