For Research Use Only

CoraLite® Plus 647-conjugated HIF-1 alpha Polyclonal antibody

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Catalog Number: CL647-20960 Featured Product

Basic Information

Catalog Number: CL647-20960 Concentration: 1000 ug/ml Source:

Rabbit Isotype:

Immunogen Catalog Number:

AG15198

GenBank Accession Number:

BC012527 GeneID (NCBI): 3091 **UNIPROT ID:** Q16665 Full Name:

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

Calculated MW: 826 aa, 93 kDa Observed MW: 120 kDa

Purification Method:

Antigen affinity purification Recommended Dilutions:

IF/ICC: 1:50-1:500 FC (Intra): 0.25 ug per 10⁶ cells in a

100 µl suspension

Excitation/Emission maxima wavelengths:

654 nm / 674 nm

Applications

Tested Applications: IF/ICC, FC (Intra) Species Specificity: human

Positive Controls:

IF/ICC: Cobalt Chloride treated HeLa cells, FC (Intra): Cobalt Chloride treated HeLa cells,

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. $Under\ hypoxic\ conditions, hydroxylation\ is\ impaired\ and\ HIF1 a\ is\ stabilized.\ HIF1 a\ localizes\ in\ cytoplasm\ in$ 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). .

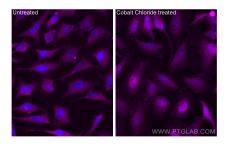
Storage

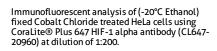
Store at -20°C. Avoid exposure to light. Stable for one year after shipment. Storage Buffer:

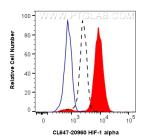
PBS with 50% glycerol, 0.05% Proclin300, 0.5% BSA, pH7.3

Aliquoting is unnecessary for -20°C storage

Selected Validation Data







1x10^6 HeLa cells untreated (dashed lines) or treated with Cobalt Chloride (red) were intracellularly stained with 0.25 ug CoraLite® Plus 647-conjugated HIF-1 alpha Polyclonal antibody (CL647-20960), or 0.25 ug CoraLite® Plus 647-conjugated Rabbit 1gG control Rabbit PolyAb (CL647-30000) (blue). Cells were fixed with 4% PFA and permeabilized with 90% MeOH.