

DESCRIPTION

Species Reactivity	Human/Mouse
Specificity	Recognizes human and mouse HIF-1 alpha/HIF1A in direct ELISAs.
Source	Monoclonal Mouse IgG ₁ Clone # 241812
Purification	Protein A or G purified from hybridoma culture supernatant
Immunogen	<i>E. coli</i> -derived recombinant human HIF-1 alpha/HIF1A Arg575-Asn826 Accession # Q16665.1
Formulation	Lyophilized from a 0.2 µm filtered solution in PBS with Trehalose. See Certificate of Analysis for details. *Small pack size (-SP) is supplied either lyophilized or as a 0.2 µm filtered solution in PBS.

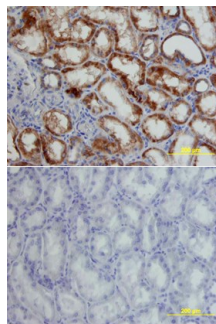
APPLICATIONS

Please Note: Optimal dilutions should be determined by each laboratory for each application. [General Protocols](#) are available in the Technical Information section on our website.

	Recommended Concentration	Sample
Immunohistochemistry	8-25 µg/mL	See Below
Intracellular Staining by Flow Cytometry	2.5 µg/10 ⁶ cells	CoCl ₂ -treated MCF-7 human breast cancer cell line, fixed with paraformaldehyde, and permeabilized with saponin
CyTOF-ready	Ready to be labeled using established conjugation methods. No BSA or other carrier proteins that could interfere with conjugation.	

DATA

Immunohistochemistry



HIF-1 alpha/HIF1A in Human Kidney Cancer Tissue.
HIF-1 alpha/HIF1A was detected in immersion fixed paraffin-embedded sections of human kidney cancer tissue using Mouse Anti-Human/Mouse HIF-1 alpha/HIF1A Monoclonal Antibody (Catalog # MAB1935) at 15 µg/mL overnight at 4 °C. Tissue was stained using the Anti-Mouse HRP-DAB Cell & Tissue Staining Kit (brown; Catalog # CTS002) and counterstained with hematoxylin (blue). Lower panel shows a lack of labeling if primary antibodies are omitted and tissue is stained only with secondary antibody followed by incubation with detection reagents. View our protocol for [Chromogenic IHC Staining of Paraffin-embedded Tissue Sections](#).

PREPARATION AND STORAGE

Reconstitution	Reconstitute at 0.5 mg/mL in sterile PBS.
Shipping	The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature recommended below. *Small pack size (-SP) is shipped with polar packs. Upon receipt, store it immediately at -20 to -70 °C
Stability & Storage	Use a manual defrost freezer and avoid repeated freeze-thaw cycles. <ul style="list-style-type: none"> • 12 months from date of receipt, -20 to -70 °C as supplied. • 1 month, 2 to 8 °C under sterile conditions after reconstitution. • 6 months, -20 to -70 °C under sterile conditions after reconstitution.

BACKGROUND

The hypoxia-inducible transcription factor 1α (HIF-1α) is the regulated member of the transcription factor heterodimer HIF-1. HIF-1 binds to hypoxia-response elements (HREs) in the promoters of many genes involved in adapting to an environment of insufficient oxygen or hypoxia. Hypoxic tissue environments occur in vascular and pulmonary diseases as well as cancer, which illustrates the broad impact of gene regulation by HIF-1α.