

DESCRIPTION	
Species Reactivity	Human/Mouse/Rat
Specificity	Detects human, mouse, and rat HIF-2 α /EPAS1 in Western blots.
Source	Polyclonal Goat IgG
Purification	Antigen Affinity-purified
Immunogen	<i>E. coli</i> -derived recombinant mouse HIF-2 α /EPAS1 Ser542-Thr874 Accession # AAH57870
Formulation	Lyophilized from a 0.2 μ m filtered solution in PBS with Trehalose. See Certificate of Analysis for details. *Small pack size (-SP) is supplied as a 0.2 μ m filtered solution in PBS.

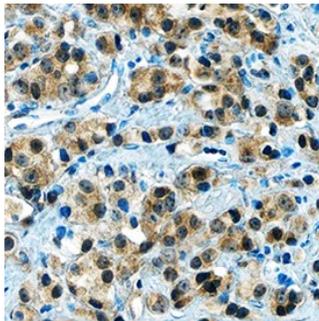
APPLICATIONS

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
Western Blot	1 μ g/mL	See Below
Immunohistochemistry	5-15 μ g/mL	See Below

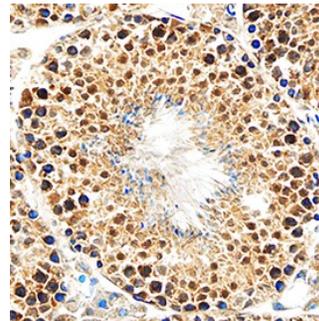
DATA

Immunohistochemistry



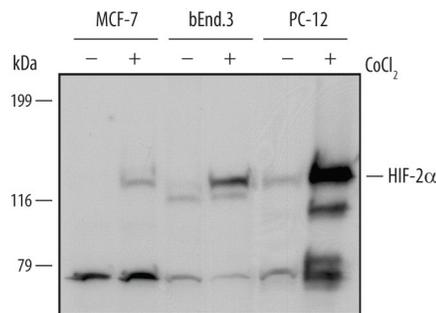
HIF-2 α /EPAS1 in Human Prostate Cancer Tissue. HIF-2 α /EPAS1 was detected in immersion fixed paraffin-embedded sections of human prostate cancer tissue using Goat Anti-Human/Mouse/Rat HIF-2 α /EPAS1 Antigen Affinity-purified Polyclonal Antibody (Catalog # AF2997) at 0.3 μ g/mL overnight at 4 °C. Tissue was stained using the Anti-Goat HRP-DAB Cell & Tissue Staining Kit (brown; Catalog # CTS008) and counterstained with hematoxylin (blue). Specific staining was localized to cytoplasm and nuclei in cancer cells. View our protocol for [Chromogenic IHC Staining of Paraffin-embedded Tissue Sections](#).

Immunohistochemistry



HIF-2 α /EPAS1 in Mouse Testis. HIF-2 α /EPAS1 was detected in perfusion fixed frozen sections of mouse testis using Goat Anti-Human/Mouse/Rat HIF-2 α /EPAS1 Antigen Affinity-purified Polyclonal Antibody (Catalog # AF2997) at 1.7 μ g/mL overnight at 4 °C. Tissue was stained using the Anti-Goat HRP-DAB Cell & Tissue Staining Kit (brown; Catalog # CTS008) and counterstained with hematoxylin (blue). Specific staining was localized to cytoplasm and nuclei in spermatocytes. View our protocol for [Chromogenic IHC Staining of Frozen Tissue Sections](#).

Western Blot



Detection of Human, Mouse, and Rat HIF-2 α /EPAS1 by Western Blot. Western blot shows lysates of MCF-7 human breast cancer cell line, bEnd.3 mouse endothelioma cell line, and PC-12 rat adrenal pheochromocytoma cell line untreated (-) or treated (+) with 150 μ M CoCl₂ for 16 hours. PVDF Membrane was probed with 1 μ g/mL of Goat Anti-Mouse HIF-2 α /EPAS1 Antigen Affinity-purified Polyclonal Antibody (Catalog # AF2997) followed by HRP-conjugated Anti-Goat IgG Secondary Antibody (Catalog # HAF109). A specific band was detected for HIF-2 α /EPAS1 at approximately 120 kDa (as indicated). This experiment was conducted under reducing conditions and using Immunoblot Buffer Group 1.

PREPARATION AND STORAGE

Reconstitution	Reconstitute at 0.2 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 2 α (HIF-2 α) is stabilized in hypoxic tissue and, similarly to HIF-1 α , complexes with Aryl hydrocarbon receptor nuclear translocator (ARNT). Both the HIF-1 and HIF-2 complexes bind hypoxia-response elements (HREs) in the promoters of many genes involved in adapting to an environment of insufficient oxygen or hypoxia. HIF-1 and HIF-2 do not appear completely redundant, although specific functions are only beginning to be elucidated. Hypoxic tissue environments occur in vascular and pulmonary diseases as well as cancer, which illustrates the potentially broad impact of gene regulation by both HIF-1 α and HIF-2 α .