Human/Rat HIF-2α/EPAS1 Antibody

Antigen Affinity-purified Polyclonal Goat IgG
Catalog Number: AF2886

DESCRIPTION

Species Reactivity	Human/Rat
Specificity	Detects human and rat HIF-2α/EPAS1.
Source	Polyclonal Goat IgG
Purification	Antigen Affinity-purified
Immunogen	*E. coli*-derived recombinant human HIF-2α/EPAS1 Ser543-Thr870 Accession # Q99814
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 as a 0.2 μm filtered solution in PBS.

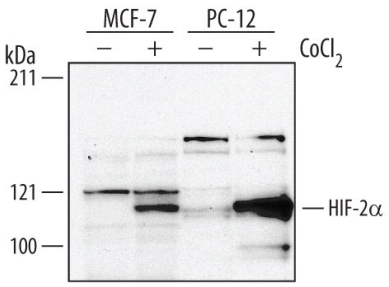
APPLICATIONS

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
Western Blot	1 µg/mL	See Below
Chromatin Immunoprecipitation (ChIP)	5 µg/5 x 10^6 cells	See Below

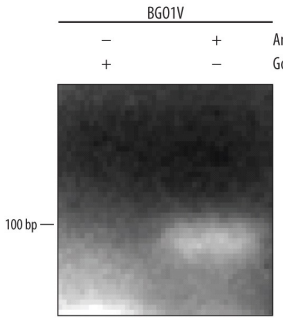
DATA

Western Blot



Detection of Human and Rat HIF-2α/EPAS1 by Western Blot. Western blot shows lysates of MCF-7 human breast cancer cell line and PC-12 rat adrenal pheochromocytoma cell line untreated (-) or treated (+) with 150 µM $CoCl_2$ for 16 h. PVDF membrane was probed with 1 µg/mL of Human/Rat HIF-2α/EPAS1 Polyclonal Antibody, followed by HRP-conjugated Anti-Goat IgG Secondary Antibody (Catalog # HAF109). A specific band was detected for HIF-2α/EPAS1 at approximately 115 kDa (as indicated). This experiment was conducted under reducing conditions and using Immunoblot Buffer Group 1.

Chromatin Immunoprecipitation (ChIP)



Detection of HIF-2α/EPAS1-regulated Genes by Chromatin Immunoprecipitation. BG01V human embryonic stem cells treated with 150 µM CoCl2 overnight were fixed using formaldehyde, resuspended in lysis buffer, and sonicated to shear chromatin. HIF-2α/EPAS1/DNA complexes were immunoprecipitated using 5 µg Goat Anti-Human/Rat HIF-2α/EPAS1 Antigen Affinity-purified Polyclonal Antibody (Catalog # AF2886) or control antibody (Catalog # AB-108-C) for 15 minutes in an ultrasonic bath, followed by Biotinylated Anti-Goat IgG Secondary Antibody (Catalog # BAF109). Immunocomplexes were captured using 50 µL of MagCellect Streptavidin Ferrofluid (Catalog # MAG999) and DNA was purified using chelating resin solution. The *oct-3/4* promoter was detected by standard PCR.

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.** ● 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 2α (HIF-2α) is stabilized in hypoxic tissue and, similarly to HIF-1α, 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-1α and HIF-2α.

bio-techne
bio-techne.com
Global info@bio-techne.com techsupport@bio-techne.com
North America TEL 800 343 7475 Europe | Middle East | Africa TEL +44 (0)1235 529449
China info.cn@bio-techne.com TEL +86 (21) 52380373
Rest of World bio-techne.com/find-us/distributors TEL +1 612 379 2956