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Rabbit Anti-HIF-2 alpha antibody

SLM-54278R

Product Name	HIF-2 alpha
Chinese Name	缺氧诱导因子 2α/EPAS1Recombinant rabbit monoclonal anti
Alias	Basic helix loop helix PAS protein MOP2; Basic-helix-loop-helix-PAS protein MOP2; bHLHe73; Class E basic helix-loop-helix protein 73; ECYT4; Endothelial PAS domain containing protein 1; Endothelial pas domain protein 1; Endothelial PAS domain-containing protein 1; EPAS 1; EPAS-1; EPAS1; EPAS1_HUMAN; HIF 1 alpha like factor; HIF 2 alpha; HIF-1-alpha-like factor; HIF-2-alpha; HIF2-alpha; HIF2A; HLF; Hypoxia inducible factor 2 alpha; Hypoxia inducible factor 2 alpha subunit; Hypoxia-inducible factor 2-alpha; Member of PAS protein 2; Member of pas superfamily 2; MOP 2; MOP2; PAS domain-containing protein 2; PASD2.
Research Area	Tumour immunology Signal transduction Apoptosis
Immunogen Species	Rabbit
Clonality	Monoclonal
Clone NO.	2G3
React Species	Human, Mouse, Rat,
Applications	WB=1:500-2000,ICC/IF=1:50-200,Flow-Cyt=1:20-50 not yet tested in other applications. optimal dilutions/concentrations should be determined by the end user.
Theoretical molecular weight	96kDa
Cellular localization	The nucleus cytoplasmic
Form	Liquid
Concentration	1mg/ml
immunogen	Recombinant human HIF-2 alpha
Lsotype	IgG
Purification	affinity purified by Protein A
Buffer Solution	1M TBS(pH7.4) with 1% BSA, 3% Proclin300 and 50% Glycerol.
Storage	Shipped at 4℃. Store at -20 °C for one year. Avoid repeated freeze/thaw cycles.

Attention	This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.
PubMed	PubMed
Product Detail	Transcription factor involved in the induction of oxygen regulated genes. Binds to core DNA sequence 5'-[AG]CGTG-3' within the hypoxia response element (HRE) of target gene promoters. Regulates the vascular endothelial growth factor (VEGF) expression and seems to be implicated in the development of blood vessels and the tubular system of lung. May also play a role in the formation of the endothelium that gives rise to the blood brain barrier. Potent activator of the Tie-2 tyrosine kinase expression. Activation requires recruitment of transcriptional coactivators such as CREBPB and probably EP300. Interaction with redox regulatory protein APEX seems to activate CTAD. **Function:** Transcription factor involved in the induction of oxygen regulated genes. Binds to core DNA sequence 5'-[AG]CGTG-3' within the hypoxia response element (HRE) of target gene promoters. Regulates the vascular endothelial growth factor (VEGF) expression and seems to be implicated in the development of blood vessels and the tubular system of lung. May also play a role in the formation of the endothelium that gives rise to the blood brain barrier. Potent activator of the Tie-2 tyrosine kinase expression. Activation requires recruitment of transcriptional coactivators such as CREBPB and probably EP300. Interaction with redox regulatory protein APEX seems to activate CTAD. **Subunit:** Efficient DNA binding requires dimerization with another bHLH protein. Heterodimerizes with ARNT. Interacts with CREBPB. **Subcellular Location:** Nucleus (Potential). **Tissue Specificity:** Expressed in most tissues, with highest levels in lung, followed by heart, kidney, brain and liver. Predominantly expressed in endothelial cells. Also found in smooth muscle cells of the uterus, neurons, and brown adipose tissue. High expression in embryonic choroid plexus and kidney glomeruli. **Post-translational modifications:** In normoxia, is probably hydroxylated on Pro-405 and Pro-530 by EGLN1/PHD1, EGLN2/PHD2 and/or EGLN3/PHD3. The hydroxylated prolines promote interaction with VHL, initiating rapid ubiquitination and

subsequent proteasomal degradation. Under hypoxia, proline hydroxylation is impaired and ubiquitination is attenuated, resulting in stabilization.
In normoxia, is hydroxylated on Asn-851 by HIF1AN thus probably abrogating interaction with CREBBP and EP300 and preventing transcriptional activation.
Phosphorylated on multiple sites in the CTAD.
The iron and 2-oxoglutarate dependent 3-hydroxylation of asparagine is (S) stereospecific within HIF CTAD domains.

Similarity:
Contains 1 basic helix-loop-helix (bHLH) domain.
Contains 1 PAC (PAS-associated C-terminal) domain.
Contains 2 PAS (PER-ARNT-SIM) domains.

SWISS:
P97481

Gene ID:
2034

Database links:

Entrez Gene: 282711 Cow

Entrez Gene: 2034 Human

Entrez Gene: 13819 Mouse

Entrez Gene: 100037272 Pig

Entrez Gene: 29452 Rat

Omim: 603349 Human

SwissProt: Q99814 Human

SwissProt: P97481 Mouse

SwissProt: Q9JHS1 Rat

Unigene: 468410 Human

Unigene: 1415 Mouse

Unigene: 55138 Rat

HIF-2α 也是机体对缺氧适应性调节中的重要调控蛋白.有学者认为：

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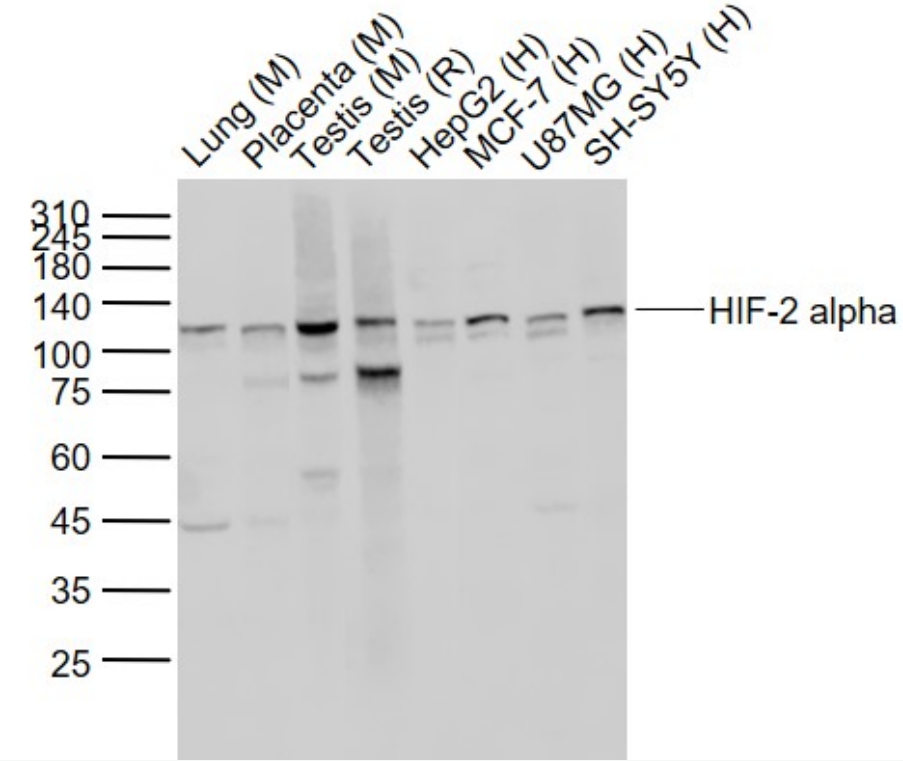
HIF-2α 对 Tumour 的能量代谢和新血管生成有促进作用,微血管的形成可抑制 Tumour 细胞的凋亡,从而促进 Tumour 的恶性发展。

Product Picture



Sample:

Lane 1: Lung (Mouse) Lysate at 40 ug

Lane 2: Placenta (Mouse) Lysate at 40 ug

Lane 3: Testis (Mouse) Lysate at 40 ug

Lane 4: Testis (Rat) Lysate at 40 ug

Lane 5: HepG2 (Human) Cell Lysate at 30 ug

Lane 6: MCF-7 (Human) Cell Lysate at 30 ug

Lane 7: U87MG (Human) Cell Lysate at 30 ug

Lane 8: SH-SY5Y (Human) Cell Lysate at 30 ug

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Primary: Anti-HIF-2 alpha (SLM-54278R) at 1/1000 dilution

Secondary: IRDye800CW Goat Anti-Rabbit IgG at 1/20000 dilution

Predicted band size: 120 kD

Observed band size: 120 kD