Anti-PHD3 [EG188e/d5]

Catalogue number: 151315
Sub-type: Primary antibody
Images:

Contributor

Inventor: Helen Turley
Institute: University of Oxford
Images:

Tool details

***FOR RESEARCH USE ONLY**

Name: Anti-PHD3 [EG188e/d5]

Alternate name:

Class: Monoclonal
Conjugate: Unconjugated
Description: PHD3 catalyzes the post-translational formation of 4-hydroxyproline in hypoxia-inducible factor (HIF) alpha proteins, hydroxylates HIF-1 alpha at Pro-564, and also hydroxylates HIF-2 alpha. It functions as a cellular oxygen sensor and, under normoxic conditions, targets HIF through the hydroxylation for proteasomal degradation via the von Hippel-Lindau ubiquitylation complex. It may play a role in cell growth regulation in muscle cells and in apoptosis in neuronal tissue. It promotes cell death through a caspase-dependent mechanism
Purpose:
Parental cell:
Organism:
Tissue:
Model:
Gender:
Isotype: IgG1
Reactivity: Human
Selectivity:
Host: Mouse
Immunogen: Residues 1-100 of human PHD3
Immunogen UNIPROT ID:
Sequence:
Growth properties:
Production details:
Formulation:

Recommended controls: ZR75 cells on hypoxic induction
Bacterial resistance:
Selectable markers:
Additional notes:

Target details

Target: Prolyl Hydroxylase 3 (PHD3)

Target alternate names:

Target background: PHD3 catalyzes the post-translational formation of 4-hydroxyproline in hypoxia-inducible factor (HIF) alpha proteins, hydroxylates HIF-1 alpha at Pro-564, and also hydroxylates HIF-2 alpha. It functions as a cellular oxygen sensor and, under normoxic conditions, targets HIF through the hydroxylation for proteasomal degradation via the von Hippel-Lindau ubiquitylation complex. It may play a role in cell growth regulation in muscle cells and in apoptosis in neuronal tissue. It promotes cell death through a caspase-dependent mechanism

Molecular weight: 27.3 kDa

Ic50:

Applications

Application: IHC ; WB
Application notes:

Handling

Format: Liquid
Concentration: 1 mg/ml
Passage number:
Growth medium:
Temperature:
Atmosphere:
Volume:
Storage medium:
Storage buffer: PBS with 0.02% azide
Storage conditions: -15° C to -25° C
Shipping conditions: Shipping at 4° C

Related tools

Related tools: Anti-PHD1 [PHD112/G7] ; Anti-PHD2 [366G/76/3]

References

References: Jubb et al. 2009. Br J Cancer. 101(10):1749-57. PMID: 19844231. ; Expression of delta-like ligand 4 (Dll4) and markers of hypoxia in colon cancer. ; Soilleux et al. 2005. Histopathology. 47(6):602-10. PMID: 16324198. ; Use of novel monoclonal antibodies to determine the expression and distribution of the hypoxia regulatory factors PHD-1, PHD-2, PHD-3 and FIH in normal and neoplastic human tissues. ; Stolze et al. 2004. J Biol Chem. 279(41):42719-25. PMID: 15302861. ; Appelhoff et al. 2004. J Biol Chem. 279(37):38458-65. PMID: 15247232. ; Genetic analysis of the role of the asparaginyl hydroxylase factor inhibiting hypoxia-inducible factor (FIH) in regulating hypoxia-inducible factor (HIF) transcriptional target genes [corrected]. ; Differential function of the prolyl hydroxylases PHD1, PHD2, and PHD3 in the regulation of hypoxia-inducible factor.