

Anti-PHD2 [366G/76/3]

Catalogue number: 151314

Sub-type: Primary antibody

Images:

Contributor

Inventor: Helen Turley

Institute: University of Oxford

Images:

Tool details

***FOR RESEARCH USE ONLY**

Name: Anti-PHD2 [366G/76/3]

Alternate name:

Class: Monoclonal

Conjugate: Unconjugated

Description: 366G/76/3 recognises human prolyl hydroxylase 2 (PHD2), a 46kDa enzyme expressed abundantly in all tissues with the highest expression in testis

Purpose:

Parental cell:

Organism:

Tissue:

Model:

Gender:

Isotype: IgG1

Reactivity: Human

Selectivity:

Host: Mouse

Immunogen: Residues 1-24 of PHD2

Immunogen UNIPROT ID:

Sequence:

Growth properties:

Production details:

Formulation:

Recommended controls: MCF7 cells

Bacterial resistance:

Selectable markers:

Additional notes:

Target details

Target: Prolyl Hydroxylase 2 (PHD2)

Target alternate names:

Target background: Hypoxia inducible factor-1 (HIF-1) is a transcriptional complex, consisting of an alpha and beta subunit, which plays a key role in coordinating the cellular response to hypoxia. During normal oxygen conditions, the alpha subunit of HIF-1 is rapidly degraded, however when hypoxia occurs this degradation is suppressed and HIF-1 activates the transcription of various genes important for survival and adaptation to hypoxia. Prolyl hydroxylase 2 catalyses the hydroxylation of specific prolyl residues within the HIF-1 alpha subunit, thereby targeting this subunit for degradation.

Molecular weight: 46.1 kDa

Ic50:

Applications

Application: FACS ; 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-PHD3 [EG188e/d5]

References

References: Andersen et al. 2011. PLoS One. 6(8):e23847. PMID: 21887331. ; Overexpression of the HIF hydroxylases PHD1, PHD2, PHD3 and FIH are individually and collectively unfavorable prognosticators for NSCLC survival. ; 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.

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