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PHD1 (YD15848) Rabbit mAb

货号: AYD11394

产品信息

反应	Human,Mouse,Rat
宿主	Rabbit
克隆性	Monoclonal
预测反应	
应用	WB IHC-P ICC/IF FC
推荐浓度	
理论分子量	44kDa/45kDa/45kDa
实测分子量	
形式	Liquid
保存条件	Store at -20℃. Avoid freeze / thaw cycles. Buffer: PBS with 0.75% BSA,50% glycerol,pH7.3.
偶联物	Unconjugated
阳性对照	
细胞定位	Nucleus
纯化	

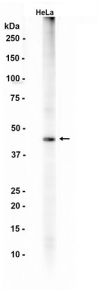
抗原信息

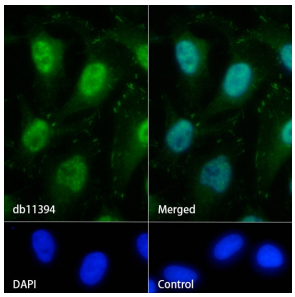
抗原信息	

靶点信息

研究背景	Prolyl hydroxylase that mediates hydroxylation of proline residues in target proteins, such as ATF4, IKBKB , CEP192 and HIF1A (PubMed:11595184, PubMed:12039559, PubMed:15925519, PubMed:16509823, Pub Med:17114296, PubMed:23932902). Target proteins are preferentially recognized via a LXXLAP motif (Pu bMed:11595184, PubMed:12039559, PubMed:15925519). Cellular oxygen sensor that catalyzes, under no rmoxic conditions, the post-translational formation of 4-hydroxyproline in hypoxia-inducible factor (HIF) al pha proteins (PubMed:11595184, PubMed:12039559, PubMed:12181324, PubMed:15925519, PubMed:19 339211). Hydroxylates a specific proline found in each of the oxygen-dependent degradation (ODD) dom ains (N-terminal, NODD, and C-terminal, CODD) of HIF1A (PubMed:11595184, PubMed:12039559, PubMe d:12181324, PubMed:15925519). Also hydroxylates HIF2A (PubMed:11595184, PubMed:12039559, PubM ed:15925519). Has a preference for the CODD site for both HIF1A and HIF2A (PubMed:11595184, PubMed :12039559, PubMed:15925519). Hydroxylated HIFs are then targeted for proteasomal degradation via the von Hippel-Lindau ubiquitination complex (PubMed:11595184, PubMed:12039559, PubMed:15925519). U nder hypoxic conditions, the hydroxylation reaction is attenuated allowing HIFs to escape degradation res ulting in their translocation to the nucleus, heterodimerization with HIF1B, and increased expression of hy poxy-inducible genes (PubMed:11595184, PubMed:12039559, PubMed:15925519). EGLN2 is involved in r egulating hypoxia tolerance and apoptosis in cardiac and skeletal muscle (PubMed:11595184, PubMed:12 039559, PubMed:15925519). Also regulates susceptibility to normoxic oxidative neuronal death (PubMed: 11595184, PubMed:12039559, PubMed:15925519). Links oxygen sensing to cell cycle and primary cilia fo rmation by hydroxylating the critical centrosome component CEP192 which promotes its ubiquitination a nd subsequent proteasomal degradation (PubMed:23932902). Hydroxylates IKBKB, mediating NF-kappa-B activation in hypoxic conditions (PubMed:17114296). Also mediates hydroxylation of ATF4, leading to dec reased protein stability of ATF4 (By similarity) Prolyl hydroxylase that mediates hydroxylation of proline r esidues in target proteins, such as ATF4, IKBKB, CEP192 and HIF1A (PubMed:24809345). Target proteins are preferentially recognized via a LXXLAP motif (By similarity). Cellular oxygen sensor that catalyzes, un der normoxic conditions, the post-translational formation of 4-hydroxyproline in hypoxia-inducible factor (HIF) alpha proteins (PubMed:18176562, PubMed:19587290, PubMed:21083501). Hydroxylates a specific p roline found in each of the oxygen-dependent degradation (ODD) domains (N-terminal, NODD, and C-ter minal, CODD) of HIF1A (PubMed:18176562, PubMed:19587290, PubMed:21083501). Also hydroxylates HI F2A (PubMed:18176562, PubMed:19587290, PubMed:21083501). Has a preference for the CODD site for both HIF1A and HIF2A (PubMed:18176562, PubMed:19587290, PubMed:21083501). Hydroxylated HIFs ar e then targeted for proteasomal degradation via the von Hippel-Lindau ubiquitination complex (PubMed:1 8176562, PubMed:19587290, PubMed:21083501). Under hypoxic conditions, the hydroxylation reaction is attenuated allowing HIFs to escape degradation resulting in their translocation to the nucleus, heterodim erization with HIF1B, and increased expression of hypoxy-inducible genes (PubMed:18176562, PubMed:1 9587290, PubMed:21083501). EGLN2 is involved in regulating hypoxia tolerance and apoptosis in cardiac and skeletal muscle (PubMed:18176562, PubMed:19587290, PubMed:21083501). Also regulates suscepti bility to normoxic oxidative neuronal death (PubMed:18176562, PubMed:19587290, PubMed:21083501). Links oxygen sensing to cell cycle and primary cilia formation by hydroxylating the critical centrosome co mponent CEP192 which promotes its ubiquitination and subsequent proteasomal degradation (By similari ty). Hydroxylates IKBKB, mediating NF-kappa-B activation in hypoxic conditions (By similarity). Also medi ates hydroxylation of ATF4, leading to decreased protein stability of ATF4 (PubMed:24809345) Prolyl hydr oxylase that mediates hydroxylation of proline residues in target proteins, such as ATF4, IKBKB, CEP192 a nd HIF1A (PubMed:15925519). Target proteins are preferentially recognized via a LXXLAP motif (By simila rity). Cellular oxygen sensor that catalyzes, under normoxic conditions, the post-translational formation o f 4-hydroxyproline in hypoxia-inducible factor (HIF) alpha proteins (PubMed:15925519). Hydroxylates a sp ecific proline found in each of the oxygen-dependent degradation (ODD) domains (N-terminal, NODD, and C-terminal, CODD) of HIF1A (By similarity). Also hydroxylates HIF2A (By similarity). Has a preference for t he CODD site for both HIF1A and HIF2A (By similarity). Hydroxylated HIFs are then targeted for proteaso mal degradation via the von Hippel-Lindau ubiquitination complex (By similarity). Under hypoxic conditio ns, the hydroxylation reaction is attenuated allowing HIFs to escape degradation resulting in their translo cation to the nucleus, heterodimerization with HIF1B, and increased expression of hypoxy-inducible gene s (By similarity). EGLN2 is involved in regulating hypoxia tolerance and apoptosis in cardiac and skeletal muscle (By similarity). Also regulates susceptibility to normoxic oxidative neuronal death (By similarity). Links oxygen sensing to cell cycle and primary cilia formation by hydroxylating the critical centrosome co mponent CEP192 which promotes its ubiquitination and subsequent proteasomal degradation (By similari ty). Hydroxylates IKBKB, mediating NF-kappa-B activation in hypoxic conditions (By similarity). Also medi ates hydroxylation of ATF4, leading to decreased protein stability of ATF4 (By similarity)
基因**ID**	112398
基因名	EGLN2, Egln2
Swiss	Q96KS0, Q91YE2, Q6AYU4
别名	PHD1 (YD15848)

产品验证





实验步骤

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