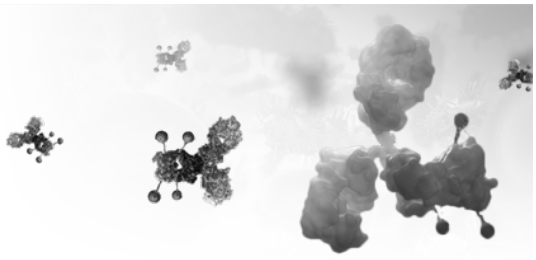

# Human EGLN1 peptide (DAG-P1048)

This product is for research use only and is not intended for diagnostic use.

## PRODUCT INFORMATION

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|---|---|
| **Antigen Description** | The protein encoded by this gene catalyzes the post-translational formation of 4-hydroxyproline in hypoxia-inducible factor (HIF) alpha proteins. HIF is a transcriptional complex that plays a central role in mammalian oxygen homeostasis. This protein functions as a cellular oxygen sensor, and under normal oxygen concentration, modification by prolyl hydroxylation is a key regulatory event that targets HIF subunits for proteasomal destruction via the von Hippel-Lindau ubiquitylation complex. Mutations in this gene are associated with erythrocytosis familial type 3 (ECYT3). [provided by RefSeq, Nov 2009] |
| **Specificity** | According to PubMed:11056053, widely expressed with highest levels in skeletal muscle and heart, moderate levels in pancreas, brain (dopaminergic neurons of adult and fetal substantia nigra) and kidney, and lower levels in lung and liver. According to Pub |
| **Purity** | 70 - 90% by HPLC. |
| **Conjugate** | Unconjugated |
| **Sequence Similarities** | Contains 1 Fe2OG dioxygenase domain.Contains 1 MYND-type zinc finger. |
| **Format** | Liquid |
| **Preservative** | None |
| **Storage** | Shipped at 4°C. Upon delivery aliquot and store at -20°C or -80°C. Avoid repeated freeze / thaw cycles. Information available upon request. |

## GENE INFORMATION

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|---|---|
| **Gene Name** | EGLN1 egl-9 family hypoxia-inducible factor 1 [ Homo sapiens (human) ] |
| **Official Symbol** | EGLN1 |

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|---|---|
| **Synonyms** | EGLN1; egl-9 family hypoxia-inducible factor 1; HPH2; PHD2; SM20; ECYT3; HPH-2; HIFPH2; ZMYND6; C1orf12; HIF-PH2; egl nine homolog 1; egl nine-like protein 1; HIF prolyl hydroxylase 2; HIF-prolyl hydroxylase 2; zinc finger MYND domain-containing protein 6; hypoxia-inducible factor prolyl hydroxylase 2; prolyl hydroxylase domain-containing protein 2; |
| **Entrez Gene ID** | 54583 |
| **mRNA Refseq** | NM_022051.2 |
| **Protein Refseq** | NP_071334.1 |
| **UniProt ID** | Q9GZT9 |
| **Chromosome Location** | 1q42.1 |
| **Pathway** | Cellular response to hypoxia, organism-specific biosystem; Cellular responses to stress, organism-specific biosystem; HIF-1 signaling pathway, organism-specific biosystem; HIF-1-alpha transcription factor network, organism-specific biosystem; HIF-2-alpha transcription factor network, organism-specific biosystem; Oxygen-dependent Proline Hydroxylation of Hypoxia-inducible Factor Alpha, organism-specific biosystem; Pathways in cancer, organism-specific biosystem; Regulation of Hypoxia-inducible Fa |
| **Function** | L-ascorbic acid binding; enzyme binding; iron ion binding; peptidyl-proline 4-dioxygenase activity; peptidyl-proline dioxygenase activity; protein binding; |

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