## CoraLite® Plus 488-conjugated PHD2/EGLN1 Monoclonal antibody

Catalog Number:CL488-66589

| Basic Information | Catalog Number: CL488-66589 | GenBank Accession Number: NM_022051 | Purification Method: Protein G purification |
| :---: | :---: | :---: | :---: |
|  | $\begin{aligned} & \text { Size: } \\ & 1000 \mu \mathrm{~g} / \mathrm{ml} \end{aligned}$ | $\begin{aligned} & \text { GeneID (NCBI): } \\ & 54583 \end{aligned}$ | CloneNo.: <br> 1A2F1 |
|  | Source: <br> Mouse | UNIPROT ID: Q9GZT9 | Recommended Dilutions: <br> IF 1:50-1:500 |
|  | Isotype: $\operatorname{lgG1}$ | Full Name: egl nine homolog 1 (C. elegans) | Excitation/Emission maxima wavelengths: |
|  |  | Calculated MW: $46 \text { kDa }$ | $493 \mathrm{~nm} / 522 \mathrm{~nm}$ |

## Applications

Tested Applications: IF/ICC

Species Specificity:
Human, Mouse , Rat, Pig

Positive Controls:
IF : HEK-293 cells,

Background Information
EGLN1, also named as PHD2, SM-20, HPH-2 and HIF-PH2, catalyzes the post-translational formation of 4hydroxyproline in hypoxia-inducible factor (HIF) alpha proteins. It hydroxylates HIF-1 alpha at 'Pro-402' and 'Pro564', and HIF-2 alpha. EGLN1 functions as a cellular oxygen sensor and, under normoxic conditions, targets HIF through the hydroxylation for proteasomal degradation via the von Hippel-Lindau ubiquitination complex. Defects in EGLN1 are the cause of erythrocytosis familial type 3 (ECYT3). EGLN1 has 3 isoforms with MW of $46 \mathrm{kDa}, 44 \mathrm{kDa}$ and 36 kDa produced by alternative splicing. It mainly localizes in cytoplasm and can shuttle between the nucleus and cytoplasm (PubMed:19631610). The antibody is specific to EGLN1.

Storage:
Store at $-20^{\circ} \mathrm{C}$. Avoid exposure to light.
Storage Buffer:
PBS with $50 \%$ Glycerol, $0.05 \%$ Proclin300, $0.5 \%$ BSA, pH 7.3 .
Aliquoting is unnecessary for $-20^{\circ} \mathrm{C}$ storage


Immunofluorescent analysis of (4\% PFA) fixed HEK-293 cells using CoraLite®®488 PHD2/EGLN1 antibody (CL488-66589, Clone: 1A2F1) at dilution of $1: 200$.

