

DESCRIPTION

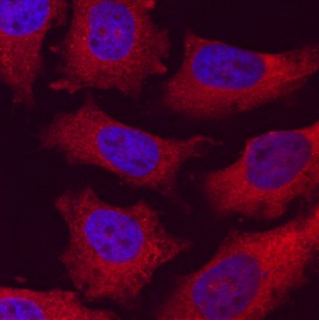
| | |
|---------------------------|---|
| Species Reactivity | Human |
| Specificity | Detects human C2CD3 in direct ELISAs. |
| Source | Polyclonal Sheep IgG |
| Purification | Antigen Affinity-purified |
| Immunogen | <i>E. coli</i> -derived recombinant human C2CD3 Met1-Asp109 Accession # Q4AC94 |
| Formulation | Lyophilized from a 0.2 µm filtered solution in PBS with Trehalose. See Certificate of Analysis for details. *Small pack size (-SP) is supplied as a 0.2 µm filtered solution in PBS. |

APPLICATIONS

Please Note: Optimal dilutions should be determined by each laboratory for each application. *General Protocols* are available in the *Technical Information* section on our website.

| | Recommended Concentration | Sample |
|----------------------------|----------------------------------|---------------|
| Immunocytochemistry | 5-15 µg/mL | See Below |

DATA

| Immunocytochemistry |
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|  <p>C2CD3 in HeLa Human Cell Line. C2CD3 was detected in immersion fixed HeLa human cervical epithelial carcinoma cell line using Sheep Anti-Human C2CD3 Antigen Affinity-purified Polyclonal Antibody (Catalog # AF7348) at 10 µg/mL for 3 hours at room temperature. Cells were stained using the NorthernLights™ 557-conjugated Anti-Sheep IgG Secondary Antibody (red; Catalog # NL010) and counterstained with DAPI (blue). Specific staining was localized to cytoplasm. View our protocol for Fluorescent ICC Staining of Cells on Coverslips.</p> |

PREPARATION AND STORAGE

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|--------------------------------|--|
| Reconstitution | Sterile PBS to a final concentration of 0.2 mg/mL. |
| Shipping | The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature recommended below. *Small pack size (-SP) is shipped with polar packs. Upon receipt, store it immediately at -20 to -70 °C |
| Stability & Storage | Use a manual defrost freezer and avoid repeated freeze-thaw cycles. <ul style="list-style-type: none"> • 12 months from date of receipt, -20 to -70 °C as supplied. • 1 month, 2 to 8 °C under sterile conditions after reconstitution. • 6 months, -20 to -70 °C under sterile conditions after reconstitution. |

BACKGROUND

C2CD3 (C2 domain-containing protein 3) is a 260 kDa (predicted) intracellular protein that apparently belongs to no known structural protein family. It is ubiquitously expressed, and plays a role in cilia formation and associated hedgehog signaling. In particular, C2CD3 is localized to the basal body, and appears to promote Gli3 proteolytic processing into a truncated transcriptional repressor. Human C2CD3 is 2353 amino acids (aa) in length. It contains two C2 domains (aa 1163-1289 and 1622-1728) that participate in Ca²⁺-dependent protein-lipid and protein-protein interactions. Three utilized phosphorylation sites exist at Thr1130, Ser2114 and Ser 2132. There are multiple potential splice variants. One possesses a three aa substitution for aa 1961-2353, a second shows a deletion of aa 1364-1382 coupled to a 27 aa substitution for aa 1881-2353, a third contains a seven aa substitution for aa 1961-2353, and a fourth contains a 34 aa substitution for aa 1888-2353. Over aa 1-109, human C2CD3 shares 94% aa identity with mouse C2CD3.