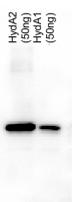


Product no **AS09 600****Anti-HydA2 | Iron-hydrogenase HydA2****Product information**

|                               |   |
|-------------------------------|---|
| <b>Immunogen</b>              | Recombinant, full-length <i>Chlamydomonas reinhardtii</i> HydA-2 UniProt: <a href="#">Q8VZZ0</a>  |
| <b>Host</b>                   | Rabbit  |
| <b>Clonality</b>              | Polyclonal  |
| <b>Purity</b>                 | Serum   |
| <b>Format</b>                 | Lyophilized   |
| <b>Quantity</b>               | 100 µl  |
| <b>Reconstitution</b>         | For reconstitution add 100 µl of sterile water  |
| <b>Storage</b>                | Store lyophilized/reconstituted at -20°C; once reconstituted make aliquots to avoid repeated freeze-thaw cycles. Please remember to spin the tubes briefly prior to opening them to avoid any losses that might occur from material adhering to the cap or sides of the tube.   |
| <b>Additional information</b> | <p>In <i>Chlamydomonas</i> <b>HydA</b> is present in low levels of <b>1 µg/liter of culture</b>. Therefore, an induction of cells by anaerobic adaptation or sulfur deprivation (10 x higher amount than with anaerobic adaptation) is necessary for successful detection using this antibody. Methods of HydA induction are described in <a href="#">Hemschemeier et al. 2009</a>.</p> <p>To detect HydA in <i>Chlamydomonas</i> extracts amount loaded per well corresponds to 2 µg of chlorophyll for sulfur deprived cells, where relatively much HydA1 is synthesized or corresponds to 2-4 µg of artificially anaerobic induced cultures, where the HydA1 protein level is lower.</p> <p>This antibody is recognizing 1 ng of recombinant HydA protein.</p> |

**Application information**

|                               |   |
|-------------------------------|---|
| <b>Recommended dilution</b>   | 1 : 5000 (WB)   |
| <b>Expected   apparent MW</b> | 53.7   47.3 kDa (after a signal peptide is cleaved)   |
| <b>Confirmed reactivity</b>   | <i>Chlamydomonas reinhardtii</i> , recombinant HydA2 expressed in <i>E.coli</i>   |
| <b>Predicted reactivity</b>   | <i>Ostreococcus</i> sp.   |
|                               | Species of your interest not listed? <a href="#">Contact us</a>   |
| <b>Not reactive in</b>        | No confirmed exceptions from predicted reactivity are currently known   |
| <b>Additional information</b> | <p>HydA2 (505aa) has a calculated MW of 53.7 kDa, but this is including the signal peptide, which gets cleaved off. The protein without TP can only be estimated, since the cleavage site is known only from in silico analysis. It has a calculated MW of 47.3 kDa and should run in the gel also according to its size.</p> <p>HydA1 (497aa) has a calculated MW of 53.1 kDa, but this is including the signal peptide, which gets cleaved off. The protein without TP has a calculated MW of 47.5 kDa and runs according to its size at about 48 kDa</p> |

**Application example**

50 ng of purified protein (HydA1 and HydA2) were separated on 10% SDS-PAGE and blotted 25 min to PVDF membrane. Filters were blocked 1 h with 3% low-fat milk powder in PBS-T (0.1% TWEEN 20) and probed with anti-HydA2 (AS09 600, 1:5000, over night at 4°C) and secondary anti-rabbit (1:10 000, 1 h) antibody (HRP conjugated, manufacture Pierce) in PBS-T containing 3% low fat milk powder. Antibody incubations were followed by washings in PBS-T (10, +10min and PBS (+5, +5 min). All washing steps were performed at RT with agitation. Signal was detected with chemiluminescent detection, using CCD camera. Exposure time was 20 min.



This product is **for research use only** (not for diagnostic or therapeutic use)

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