

Agrisera

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

contact: support@agrisera.com

Agrisera AB | Box 57 | SE-91121 Vännäs | Sweden | +46 (0)935 33 000 | www.agrisera.com

product **AS11 1789S**

FtsH2 | FtsH2 positive control/quantitation standard

product information

Background | FtsH belong to a family of ATP dependent peptidases. Localized in a chloroplast are following isoforms: FTSH1 (synonymes AAA, FTSH, FTSH Protease 1), FtsH2 (VAR2, VARIEGATED 2), FtsH5 (VAR1, VARIEGATED 1), FtsH6 (FTSH PROTEASE 6), FtsH7, FtsH8. FtsH9.
Localized in mitochondria are following isoforms: FtsH3 (FTSH Protease 3), FtsH4, FtsH10, FtsH11.

Format | Lyophilized

Quantity | 250 µl

Reconstitution | For reconstitution add 225 µl of sterile water.

Storage | Store lyophilized/reconstituted at -20°C; once reconstituted make aliquots to avoid repeated freeze-thaw cycles. Please, remember to spin tubes briefly prior to opening them to avoid any losses that might occur from lyophilized material adhering to the cap or sides of the tubes.

Tested applications | Western blot (WB)

Related products | [AS11 1789](#) | anti-FtsH1-11 | ATP-dependent zinc metalloprotease FtsH1-11
[AS16 3930](#) | anti-FtsH1 + FtsH5 | ATP-dependent zinc metalloprotease FtsH1 + FtsH5 (chloroplastic)
[AS16 3929](#) | anti-FtsH2 + FtsH8 | ATP-dependent zinc metalloprotease FtsH2 + FtsH8 (chloroplastic)
[AS07 204](#) | anti-FtsH3 + FtsH10 | ATP-dependent zinc metalloprotease FtsH3 + FtsH10 (mitochondrial)
[AS07 205](#) | anti-FtsH4 | ATP-dependent zinc metalloprotease FtsH4 (mitochondrial)
[AS05 094A](#) | anti-FtsH6 | ATP-dependent zinc metalloprotease FtsH6 (chloroplastic)
[AS06 130](#) | anti-FtsH9 | ATP-dependent zinc metalloprotease FtsH9 (chloroplastic)
[AS07 251](#) | anti-FtsH10 | ATP-dependent zinc metalloprotease FtsH10 (mitochondrial)

[Antibodies to other proteins involved in photosynthesis](#)

[Plant protein extraction buffer](#)

[Secondary antibodies](#)

Additional information | The FtsH2 protein standard can be used in combination with anti-FtsH2 antibodies to quantitate FtsH2 from a range of cyanobacteria. [Global antibodies](#) are raised against highly conserved amino acid sequences in the FtsH protein.

Quantitative western blot: [detailed method description](#), [video tutorial](#)

Application information

Recommended dilution | **Standard curve:** 3 loads are recommended (0.5, 2 and 4µl).
For most applications a sample load of 0.2µg of chlorophyll will give a FtsH2 signal in this range.

Positive control: load per well: a 2 µl load is optimal for most chemiluminescent detection systems.

This standard **is stabilized and ready** and does not require heating before loading on the gel.

Please note that this product contains 10% glycerol and might appear as liquid but is provided lyophilized. Allow the product several minutes to solubilize after adding water. Mix thoroughly but gently. Take extra care to mix thoroughly before each use, as the proteins tend to settle with the more dense layer after freezing.

Expected | apparent MW | 75 kDa

Additional information | **Concentration:** after adding 225 µl of sterile milliQ water final concentration of the standard is 0.1 pmoles/µl

This standard is ready-to-load and does not require any additions or heating. It needs to be fully thawed and thoroughly mixed prior to using. Avoid vigorous vortexing, as buffers contain detergent. Following mixing, briefly pulse in a microcentrifuge to collect material from cap.

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Selected references

Li et al. (2016). A Hard Day's Night: Diatoms Continue Recycling Photosystem II in the Dark. *Front. Mar. Sci.*, 08 November 2016