product information

**Background**
Ferritin forms a 24-subunit cage for storage of mineral iron. In plants, ferritin is predominantly localized in the plastids, and its expression is upregulated in response to iron or oxidative stress.

**Immunogen**
Purified ferritin from dried peas, *Pisum sativum* L. After extraction from pea flour, the ferritin was further purified by gel filtration chromatography to >95% purity as estimated from a Coomassie-stained gel.

Antibody is most likely to bind to all ferritin isoforms from pea however it has not been confirmed as yet.

**Host**
Rabbit

**Clonality**
Polyclonal

**Purity**
Affinity purified serum in PBS, pH 7.4

**Format**
Lyophilized

**Quantity**
50 µg

**Reconstitution**
For reconstitution add 50 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**
- AS10 674 | Anti-Ferritin (plant), rabbit antibody (made to synthetic peptide), rabbit antibodies
- AS06 126 | Anti-Ferr1 | ferritin 1 (pre-apoferritin, algae), rabbit antibodies
- Plant protein extraction buffer
- Secondary antibodies

**Application information**

**Recommended dilution**
1 : 5000-10 000 (WB)

**Expected | apparent MW**
23 kDa in legumes, 24 kDa (*Arabidopsis thaliana*)

**Confirmed reactivity**
*Arabidopsis thaliana, Brassica oleracea, Hordeum vulgare, Medicago truncatula, Pisum sativum, Spinacia oleracea*

**Predicted reactivity**

**Additional information**
Note, the calculated molecular weight of pea ferritin is 28 kDa. Removal of the N-terminal targeting sequence upon protein import into plastids results in a protein with an apparent mol weight of ~23 kDa.

This antibody is also recognizing horse ferritin (above 100 ng in Western blot).

**Selected references**
Application example

Molecular weight markers (1); purified ferritin from *Pisum sativum*, 5 ng (2) and 0.5 ng (3); 5 µg of *Pisum sativum* total cell extract (4); 5 µg *Arabidopsis thaliana* total leaf extract (5). Proteins were separated on a 12% SDS-PAGE gel and transferred to nitrocellulose membrane using a semi-dry blotting apparatus. Blots were blocked in TBS, 0.1% (v/v) Tween-20, 5% (w/v) skimmed dried milk (TBS-TM) for 1 hour at RT. The antiserum was diluted 1: 5,000 in TBS-TM and incubated with the blot for 2 hours at RT. The blot was washed 3 times for 10 min with TBS-TM, then incubated with secondary antibodies anti-rabbit IgG HRP diluted to 1: 5000 in TBS-T for 1 hour. The blot was washed 4 times with TBS-T and developed with chemiluminescent detection reagent.

Courtesy of Dr. Janneke Balk, John Innes Centre, UK

Molecular weight markers, purified pea ferritin and 20 µg of plant cell extracts from various plant species depicted at the top of the image. Proteins were separated on a 12% SDS-PAGE gel and transferred to nitrocellulose membrane using a semi-dry blotting apparatus. Blots were blocked in TBS, 0.1% (v/v) Tween-20, 5% (w/v) skimmed dried milk (TBS-TM) for 1 hour at RT. The antiserum was diluted 1: 5,000 in TBS-TM and incubated with the blot for 2 hours at RT. The blot was washed 3 times for 10 min with TBS-TM, then incubated with secondary antibodies anti-rabbit IgG HRP diluted to 1: 5000 in TBS-T for 1 hour. The blot was washed 4 times with TBS-T and developed with chemiluminescent detection reagent.

Courtesy of Emily Jones, John Innes Centre, UK