Product no AS11 1801
H1 | Histone H1

Product information

| Background | Histone 1 (H1) is a protein located in nuclei, incorporated into chromatin. |
| Immunogen | native H1 protein purified from *Nicotiana tabacum* (H1A, H1B H1C,D,E,F) |
| 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

Chromatin Immunoprecipitation (IP) (ChIP), Western blot (WB), Immunocytochemistry (ICC) (ICC)

Related products

AS10 710 | Anti-H3 | histone H3, rabbit antibody
AS11 1804 | Anti-RNA polymerase II subunit B1, rabbit antibody
AS16 3197 | Anti-H3 | Histone 3 core, monoclonal antibody
AS15 2855 | Anti-H3 | histone H3, chicken antibody
AS10 710-ALP | Anti-H3 | Histone H3, ALP-conjugated (40 µg)
AS10 710-HRP | Anti-H3 | Histone H3, HRP-conjugated (40 µg)
AS16 3968 | Anti-HDT3 | Histone deacetylase HDT3. rabbit antibodies

collection of antibodies to DNA/RNA/cell cycle

Application information

Recommended dilution | 1 : 100-1 : 500 (ICC), 1 : 5000 (WB)

Expected | apparent MW | 15 | 17 kDa

Confirmed reactivity | *Arabidopsis thaliana, Nicotiana tabacum, Triticum aestivum*

Predicted reactivity | *Lathyrus sativus, Phaseolus vulgaris, Pisum sativum, Solanum lycopersicum, Vicia faba*

Not reactive in | No confirmed exceptions from predicted reactivity are currently known.

Selected references


50 µl of a total protein from Arabidopsis thaliana leaves (wt and single, double and triple H1 mutants as well as overexpressed H1 as a GFP fusion) extracted in a following way; samples were grinded in LN2, suspended in 1xSDS buffer (sample:buffer 1:5), sonicated (10 min., max. power, in ice-cooled sonicating bath (BioRuptor, Diagenode, Belgium) and were separated on 15 % SDS-PAGE and blotted 2h to PVDF(Millipore Westran). Blots were blocked with 5 % non-fat milk TBST for 1h at room temperature (RT) with agitation. Blot was incubated in the primary antibody at a dilution of 1: 5 000 for over night at 4 °C with agitation. The antibody solution was decanted and the blot was rinsed and washed four times for 10 min in TBS-T at RT with agitation in 2.5 % non-fat milk in YBST. Blot was incubated in secondary antibody (anti-rabbit IgG horse radish peroxidase conjugated,from Agrisera, AS09 602) diluted to 1:10 000 in for 1h at RT with agitation. The blot was washed as above and developed for 5 min with a home made ECL. Exposure time was 5 min.

Courtesy of Dr. Maciej Kotliński, Institute of Biochemistry and Biophysics of Polish Academy of Sciences in Warsaw, Poland

Immunolocalization

Whole-mount immunostaining on Arabidopsis thaliana ovule primordia stage 2-II. Steps involved: clarification (methanol/xylene), cell wall digestion and permeabilization before application of the primary, then secondary antibody for 12-14 hours at 4 °C; fixation: BVO buffer: buffer from Bauwens and Van Oostveld 1996), 2mM EGTA pH7.5, 10% DMSO, 1% Tween in PBS (containing 1% formaldehyde) for 30 min. rotating/shaking plate RT; blocking: none; counterstaining: propidium iodide and mounted in Prolong Gold (Invitrogen); primary antibody dilution: 1:200 in PBS + 0.2% Tween-20; secondary antibody dilution: 1:200 at 4°C, 24h, goat anti-rabbit IgG Alexa 488 conjugated (Molecular Probes (A11008)).

H1 immunostaining in Arabidopsis thaliana ovule primordia stage 2-II is in accordance with H1.1-GFP expression pattern (She et al 2013 et al. 2013).

Courtesy of Dr. Kinga Rutowicz, IBB PAS, Warsaw, Poland, with the technical assistance of Drs. Wenjing She and Célia Baroux, University of Zürich, Switzerland.