

product **AS99 001**

KLH | Keyhole limpet hemocyanin

product information

background	Keyhole limpet hemocyanin (KLH) is a large copper-containing protein consisting of subunits with MW of 400 kDa. It is found in the hemolymph of the sea mollusk <i>Megathura crenulata</i> . This extracellular respiratory protein has many immunostimulatory properties, including the ability to enhance the host's immune response by interacting with T cells, monocytes, macrophages, and polymorphonuclear lymphocytes. Since its discovery, KLH has been used primarily as a carrier for vaccines and antigens and as adjuvant treatment in regimens such as antimicrobial therapy.
immunogen	purified keyhole limpet hemocyanin (KLH), whole molecule,
antibody format	rabbit; polyclonal; affinity purified serum in PBS pH 7.4; lyophilized
quantity	50 µg - for reconstitution please add 50 µl of dest. 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), ELISA (ELISA), immunolocalization (IL)
additional information	protein present in plant vascular tissue (xylem and vascular cambium) is detected by anti-KLH antibodies (Höglund et al. 2002) which might lead to false results in IL when using anti-peptide antibodies generated to KLH-conjugated peptide. Further information about it can be found here . 50 µg of anti-KLH antibody is enough for ca. 50 western blots

application information

recommended dilution	1: 10 000 (ELISA), 1: 10 000 (WB), 1: 1000 (IL)
expected apparent MW	ca. 400 kDa/subunit
confirmed reactivity	<i>Megathura crenulata</i> - most commonly used carrier protein
predicted reactivity	<i>Megathura crenulata</i> - most commonly used carrier protein
not reactive in	no confirmed exceptions from predicted reactivity known in the moment
additional information	Antibody can be used as a negative control to determine if observed signal is generated by anti-KLH or anti-peptide antibodies. Due to its large size KLH protein will be very difficult to separate on SDS-PAGE.

selected references

[Höglund](#) et al. (2002). An Antigen Expressed During Plant Vascular Development Crossreacts with Antibodies Towards KLH (Keyhole Limpet Hemocyanin). J of Histochem & Cytochem. 50:999-1003.