

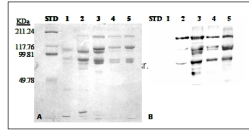
product **AS06 127**
VTG | sole vitellogenin

product information

background	Vitellogen (VTG) is a glucolipoprotein yolk precursor produced by all oviparous animals. This protein is female-specific and its expression is under hormonal control (estrogen). However, in the presence of Endocrine Disrupting Chemicals (EDC's), males can express the VgTG gene in a dose dependent manner. The use of VTG gene expression in male fish can be used as a molecular marker of exposure to estrogenic EDC's.
immunogen	native vitellogenin purified from plasma of estradiol induced male of Senegalese sole (<i>Solea senegalensis</i>)
antibody format	rabbit; polyclonal; serum; lyophilized
quantity	200 µl - for reconstitution add 200 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), ELISA (ELISA)
additional information	to be added when available

application information

recommended dilution	1: 5 000 (WB), 1: 5 000 on sole serum (ELISA)
expected apparent MW	ca. 200 kDa
confirmed reactivity	Senegalese sole, <i>Dicentrarchus labrax</i> (sea bass), <i>Sparus aurata</i> (seabream)
predicted reactivity	n. a.
not reactive in	no confirmed exceptions from predicted reactivity known in the moment
additional information	the developed VTG ELISA, using these VTG and AbVTG, has been validated for Senegalese sole, sea bass (<i>Dicentrarchus labrax</i>) and seabream (<i>Sparus aurata</i>), which all gave parallel displacement curves in the assay. Probably, plasmas from several other fish species displace parallel and can also be used in the assay, although it has to be validated for each case.
selected references	<u>Guzman</u> et al. (2008) Vitellogenin, steroid plasma levels and spawning performance of cultured female Senegalese sole (<i>Solea senegalensis</i>). Gen and Comp Endocrinology 156: 285-297.



application example

STD: Protein standard (molecular weights of the proteins are indicated on the left) **(1)** plasma from male sole (load 0.11 ul of plasma), **(2)** plasma from vitellogenic female sole (load 0.11 ul of plasma), **(3)** plasma from estradiol-treated male sole (load 0.08 ul of plasma), **(4)** VTG precipitate (load 0.83 ul of precipitate), **(5)** purified VTG (load 2 ul of purified preparation, corresponding to around 0.14 ug and spawning performance in cultured VTG) were separated on SDS-PAGE 7.5% resolving gel, 4% stacking gel. Samples were denatured in SDS and b- mercaptoethanol and treated 4 min 95 oC before loading. Following gel electrophoresis proteins were transferred to **PVDF** Membrane (Inmobilon-P, Millipore) for 2 h. Blots were blocked in TBST containing 2% non-fat dry milk. Blots were incubated in primary antibody at a dilution 1: **40 000**, followed by incubation with secondary antibodies (GAR-HRP, BioRad, dilution 1:2,000) and chemiluminescence development (Luminol Reagent, Santa Cruz Biotechnology).