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## Specification Sheet

### Mega-HA™ Ladder

Catalogue No. HYA-MGLAD-20

#### Product Description

Select-HA™ is a hyaluronic acid (HA) preparation of uniform and narrow size distribution prepared by *in vitro* synthesis using recombinant *Pasteurella multocida* hyaluronan synthase<sup>1</sup>. The Mega-HA™ Ladder is a mixture of streptavidin complexes containing one, two, three or four end-labeled biotin-Select-HA molecules of very defined sizes for use as size standards in gel electrophoresis or other separation methods. The size (mass) of the monomeric Select-HA sample was determined by SEC-MALLS. The migration of the four resulting complexes with streptavidin is well fit by a first order linear regression line (cc=-0.99), demonstrating that the complexes behave as expected for their predicted masses. (The contribution of the streptavidin protein's mass results in a very small mobility shift of high molecular mass HA on agarose gels; this effect is relatively insignificant for the higher order complexes.)

#### Recommended Usage Procedure

Centrifuge the tube for a few seconds to collect the Mega-HA™ solution in the bottom of the tube. Electrophoresis of 5µl of the sample (Fig. 1) using a standard gel loading buffer on an agarose gel (0.6 – 1%) results in clearly defined bands when stained with 0.005% Stains-all (in 50% ethanol)<sup>2</sup>.

#### Quantity

The tube contains 5 • g (total) of Mega-HA™ Ladder supplied as a solution in water. The materials are sufficient for at least 20 lanes.

#### Storage

Store at -20°C or below. To avoid frequent freeze-thaw, aliquoting is recommended. Avoid contamination with microbes or HA-degrading enzymes, proteases, high temperature or boiling.

#### References

1. Jing, W. and DeAngelis, P.L. (2004) *J. Biol. Chem.* **279**, 42345-42349.
2. Lee, H.G. *et al.* (1994) *Analytical Biochem.* **219**, 278-287.

**For research use as molecular mass markers only**

U.S. patent 6,444,447 and patents pending