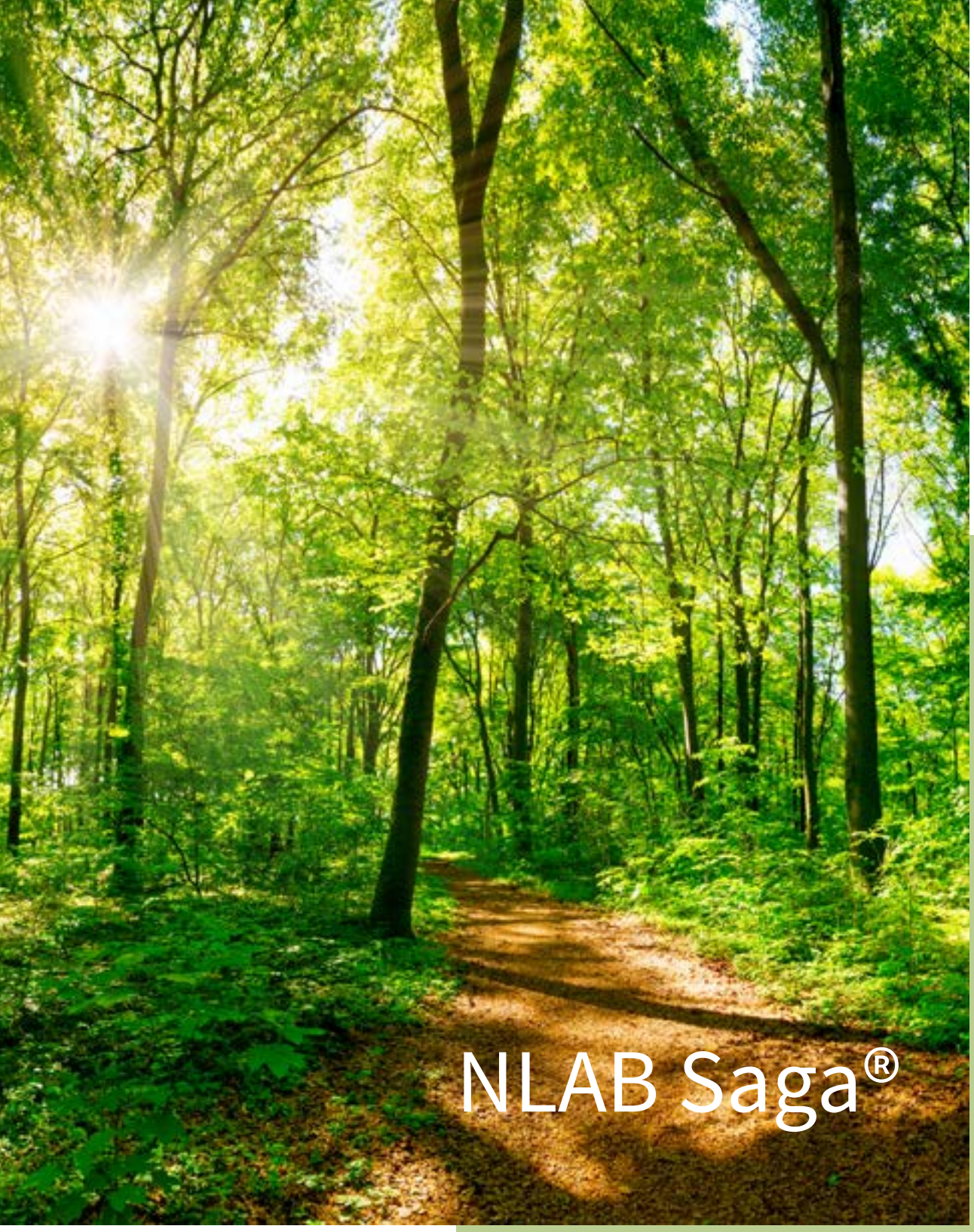


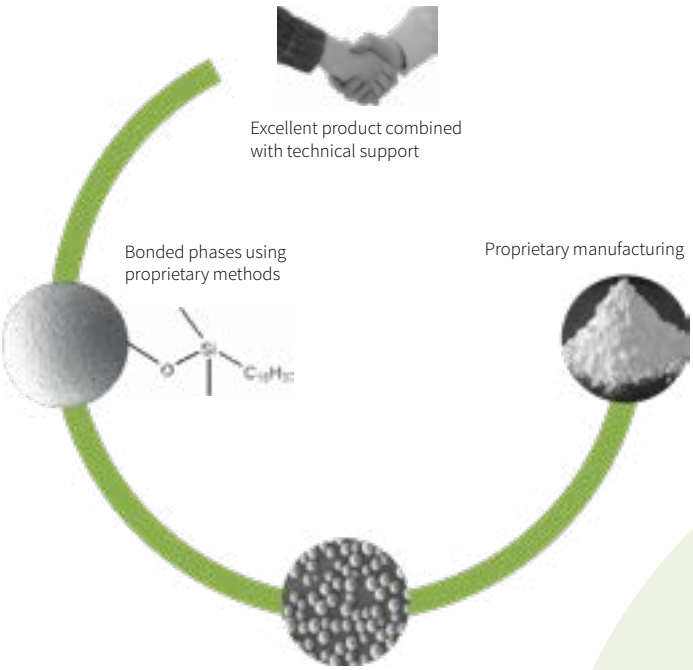
NLAB Saga®

Better and Cheaper Medicine through Porous Silica

NANOLOGICA

NLAB Saga®

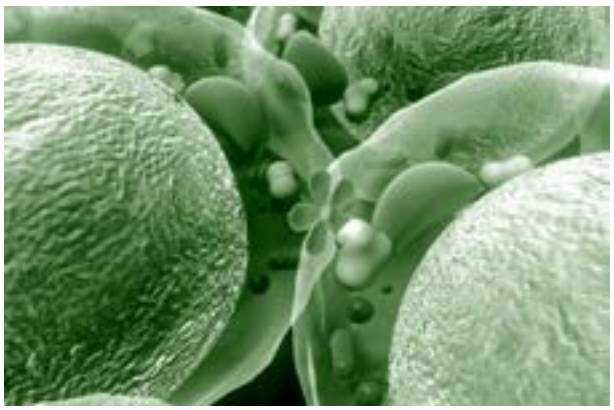
A NEW GENERATION SILICA



NLAB Saga® was developed by Nanologica with a clear goal in mind – to increase the availability of better and cheaper peptide and oligonucleotide-based medicines to a larger number of patients across the world, for the betterment of mankind.

NLAB Saga® has been specifically developed to meet the strict requirements of industrial scale purification by chromatography. It has a high available surface area and ligand density, with narrow pore size distribution. This, combined with controlled particle size distribution, results in a silica with a high loading capacity and low backpressure. Due to its exceptional mechanical and chemical stability, NLAB Saga® is an excellent choice for the purification of peptides such as insulin, insulin analogues and GLP-1 analogues.

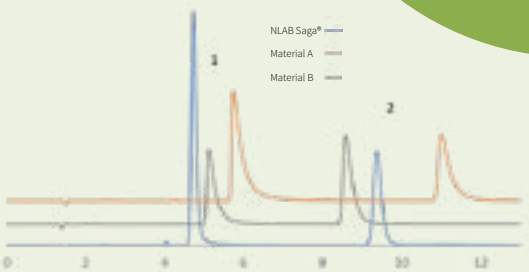
Nanologica's proprietary manufacturing process, combined with dedicated and experienced technical support, makes NLAB Saga® an excellent choice for your purification needs – it is a new generation of silica.



Nanologica is a Swedish nanotechnology company developing and manufacturing silica for purification by chromatography. At our multi-ton production facility, we have full control of the manufacturing process in each step. This enables us to ensure a sustainable production of silica batches with excellent properties for the purification of peptides.

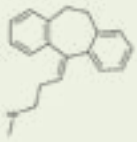
We take great pride in the quality and performance of our products – they embody our core values:
Swedish Excellence in Nanoporous Silica.

Chromatography reveals superior adsorptive properties for NLAB Saga® compared to other silica materials, due to NLAB Saga® having a fully homogenous and smooth surface, a high and evenly distributed ligand density as well as a low content of metals.

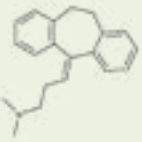


The primary cause of peak tailing (Tf) is the occurrence of more than one mechanism of analyte retention. Secondary analyte interactions, with ionised silanol groups on the silica surface, give rise to peak tailing. These interactions need to be minimised to achieve superior peak shapes and this study indicates that NLAB Saga® has minimal secondary interactions.

Specifications	Tf(Nor)	Tf(Ami)
NLAB Saga®	**1.9**	**1.4**
Material A	3.6	2.2
Material B	3.4	2.2

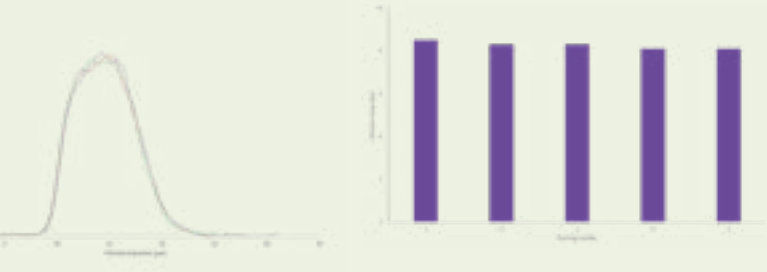


1. Nortriptyline



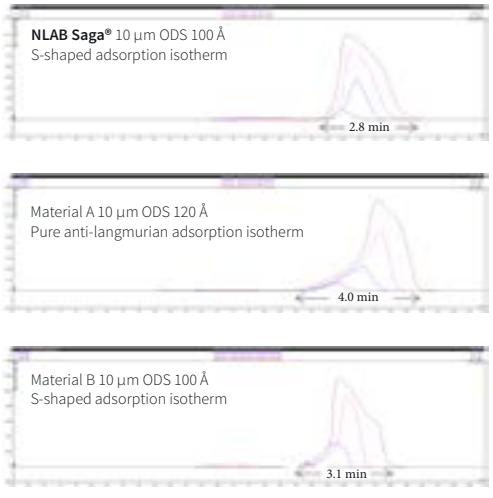
2. Amitriptyline

NLAB Saga® has an excellent mechanical stability due to narrow pore size distribution and pore volume.



Packing and unpacking of silica in a DAC column at 100 bar is a generally accepted test of mechanical strength of silica. Minimum back pressure drop over packing cycles and unchanged particle size distribution indicates a high mechanical stability of NLAB Saga®.

NLAB Saga® has an outstanding loading capacity due to a high available surface area and absence of micropores, as well as a homogenous surface with narrow pore volume distribution.



Loading comparisons from analytical up to preparative scale of an 8 A.A. cyclic peptide shows the narrowest band broadening for NLAB Saga® indicating NLAB Saga® having the highest loading capacity.

NLAB Saga® is an optimum choice for large scale peptide purification:

- Perfectly spherical, fully porous silica
- Superior mechanical stability
- Exceptional chemical stability at high and low pH

Nanologica has a dedicated global application team specialized in the purification of peptides, a support team to assist with method development, and a product development team curious to explore future applications.

Contact us to learn more!
Your Nanologica Team

www.nanologica.com

Link to website

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