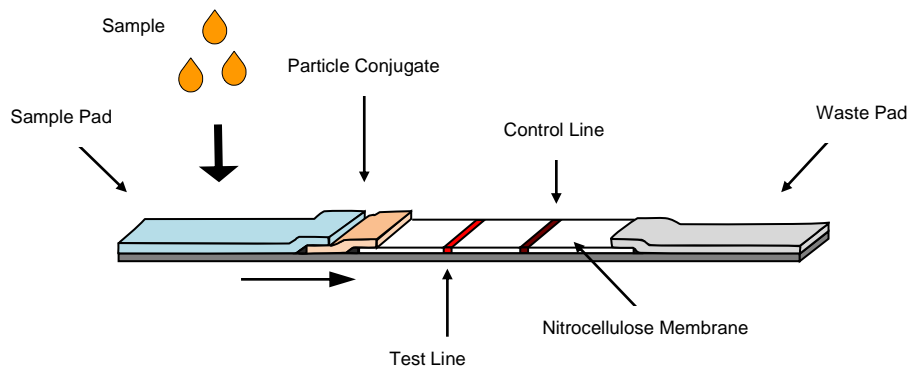


# Product Sheet

V3.0

## Streptavidin Gold (Article No: 605044)

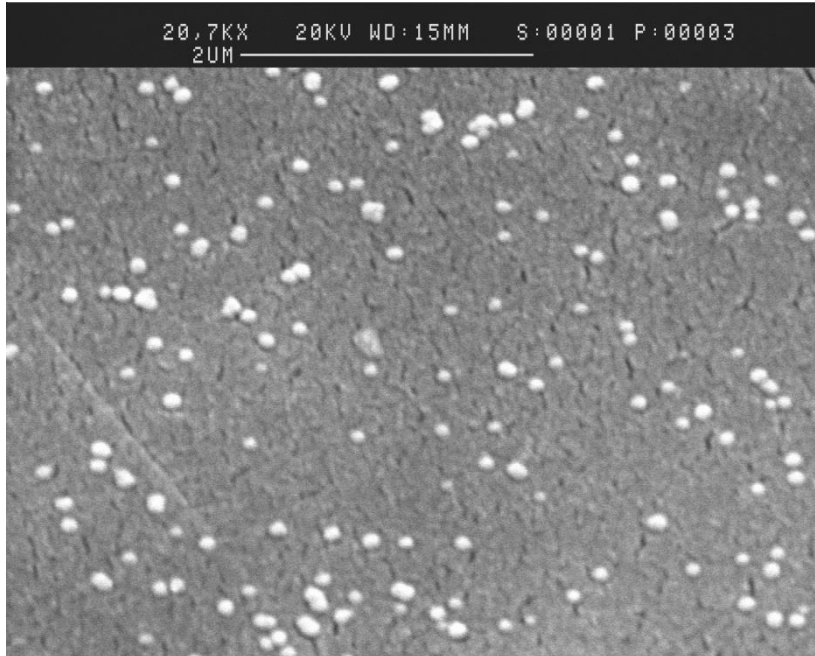
**Application:** Lateral Flow Procedures



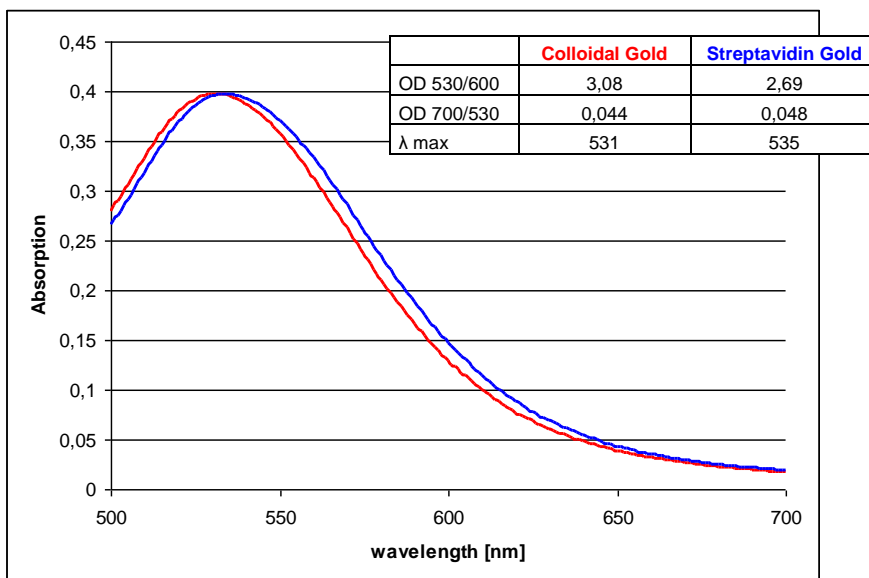
**Lateral Flow:** Gold conjugates are widely used as direct label for sensitive colorimetric detection of analytes in lateral flow tests (rapid tests). On so called test strips or dip sticks, the sample is run through a membrane by capillary force. On the test line, the detection of an analyte is performed by classical immunological means. A control line proves the validity of the assay. Being a semi-quantitative method, lateral flow tests are often applied to prove presence or absence of a given substance. Therefore, the result can just be read by visual inspection (yes/no decision). Like a classical ELISA in a microplate, a lateral flow test can be designed as a sandwich or as a competitive format. Lateral flow tests are relatively cheap, do not require instrumentation and can be performed on site, wherever it is.

**Features:** Streptavidin Gold is a stable ready-to-use reagent which can easily be combined with any biotinylated component, like an antigen, an antibody or a small molecule. The interaction of streptavidin with gold is stable and the particles are blocked. Therefore, the gold conjugates exhibit a low level of non-specific binding.

# Streptavidin Gold



Streptavidin Gold, Scanning Electron Microscope 20.000x, OD<sub>530</sub>=1.0



VIS-Spectrum of colloidal gold and Streptavidin Gold

## Streptavidin Gold (Specifications)

Article No.:	605044
Volume:	bulk quantities
Appearance:	raspberry red liquid
Raw Gold:	colloidal gold (40 nm)
Coating Protein:	streptavidin
Particle size (PCS):	42 - 50 nm
Concentration (OD <sub>530</sub> ):	20 - 30
λ max:	534 ± 2 nm
OD <sub>530/600</sub> :	> 2.20
OD <sub>700/530</sub> :	< 0.070
Particle volume (at 45 nm):	approx. 47 700 nm <sup>3</sup>
Surface area (at 45 nm):	approx. 6 400 nm <sup>2</sup>
Gold concentration at OD <sub>530</sub> = 1:	approx. 45 µg/ml*
Particle per ml at OD <sub>530</sub> = 1:	approx. 7 x 10 <sup>10*</sup>
Particle concentration at OD <sub>530</sub> = 1:	approx. 0.12 nM*
Streptavidin molecules per particle:	approx. 150*
Streptavidin concentration at OD <sub>530</sub> = 1:	approx. 17 nM*
Streptavidin concentration at OD <sub>530</sub> = 1:	approx. 1.0 µg/ml
Storage buffer:	15 mM Tris, pH 8.0, 1 mg/ml blocking agent
Preservative:	0.05% Na-Azide
Storage temperature:	2 - 8 °C
Shipment conditions:	cooled
Stability:	24 months

\* values based on contact area for streptavidin of 25 nm<sup>2</sup> and coverage of 75% of the surface area of the gold particles by streptavidin