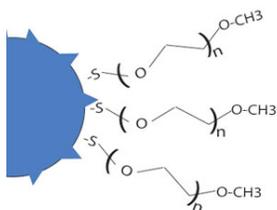


PRODUCT DATA SHEET

Methylated Gold NanoUrchins



Description

Cytodiagnosics Methylated gold nanourchins are available with two different lengths of PEG surface spacers, *i.e.* 2000Da and 5000Da offering control of particle hydrodynamic size.

Our Methylated gold nanourchins are available in 6 different sizes ranging from 50 -100nm, and have uniform size distribution (CV <10%).

For custom sizes, formulations or bulk quantities please contact our customer service department.

Features

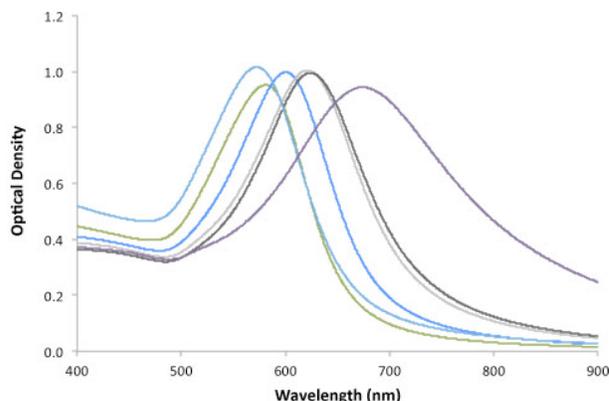
- Superior size distribution compared to the leading competitor; available from 50nm to 100nm.
- Precisely engineered surface with low protein binding characteristics.

Applications

- Ideal as an inactive control to other functionalized gold nanourchins such as carboxyl, amine and biotin.

Characteristics

Core diameter: 50 -100nm (Coefficient of Variance < 10%)
 Polydispersity Index (PDI): < 0.25
 Amount: OD=50 (OD/ml = 50)
 Absorbance (λ_{max}): 580-680nm
 Supplied in USP Grade H₂O



Storage

This product should be stored at 4°C. Do not freeze. If stored as specified, Cytodiagnosics Methylated Gold Nanourchins are stable for at least 12 months.

Handling

When stored for a long period of time gold nanourchins may sediment at the bottom of the vial, which is especially true for larger particle sizes. Prior to use, re-suspend the sedimented particles by swirling until a homogenous solution is obtained.

Precautions and Disclaimer

These products are for R&D use only, not for drug, household, or other uses. Please consult the Material Safety Data Sheet available online at www.cytodiagnosics.com for information regarding hazards and safe handling procedures.



Diameter (nm)	Peak SPR Wavelength (nm)	NPS/ml	Wt. Conc. (mg/ml)	Size Dispersity (+/-nm)	Particle Volume (nm ³)	Surface Area (nm ²)	Surface/Volume Ratio	Particle Mass (g)	Molar Mass (g/mol)	Molar Conc.
50	585	1.76E+12	2.23	<10%	6.54E+04	7.85E+03	0.12	1.27E-15	7.64E+08	2.92E-09
60	585	9.80E+11	2.15	<10%	1.13E+05	1.13E+04	0.1	2.19E-15	1.32E+09	1.63E-09
70	600	6.00E+11	2.09	<10%	1.80E+05	1.54E+04	0.086	3.48E-15	2.10E+09	9.95E-10
80	620	3.91E+11	2.03	<10%	2.68E+05	2.01E+04	0.075	5.20E-15	3.13E+09	6.50E-10
90	630	2.69E+11	1.99	<8%	3.82E+05	2.54E+04	0.067	7.40E-15	4.46E+09	4.46E-10
100	680	1.92E+11	1.95	<8%	5.24E+05	3.14E+04	0.06	1.02E-14	6.11E+09	3.19E-10

Catalog Number	Description	Lambda max (nm)	Sizes
GUM2K-50- X*	50nm Methyl Gold Nanourchins (2000Da PEG)	585	0.5ml, 1.0ml (50 OD)
GUM2K-60- X*	60nm Methyl Gold Nanourchins (2000Da PEG)	585	0.5ml, 1.0ml (50 OD)
GUM2K-70- X*	70nm Methyl Gold Nanourchins (2000Da PEG)	600	0.5ml, 1.0ml (50 OD)
GUM2K-80- X*	80nm Methyl Gold Nanourchins (2000Da PEG)	620	0.5ml, 1.0ml (50 OD)
GUM2K-90- X*	90nm Methyl Gold Nanourchins (2000Da PEG)	630	0.5ml, 1.0ml (50 OD)
GUM2K-100- X*	100nm Methyl Gold Nanourchins (2000Da PEG)	680	0.5ml, 1.0ml (50 OD)
GUM5K-50- X*	50nm Methyl Gold Nanourchins (5000Da PEG)	585	0.5ml, 1.0ml (50 OD)
GUM5K-60- X*	60nm Methyl Gold Nanourchins (5000Da PEG)	585	0.5ml, 1.0ml (50 OD)
GUM5K-70- X*	70nm Methyl Gold Nanourchins (5000Da PEG)	600	0.5ml, 1.0ml (50 OD)
GUM5K-80- X*	80nm Methyl Gold Nanourchins (5000Da PEG)	620	0.5ml, 1.0ml (50 OD)
GUM5K-90- X*	90nm Methyl Gold Nanourchins (5000Da PEG)	630	0.5ml, 1.0ml (50 OD)
GUM5K-100- X*	100nm Methyl Gold Nanourchins (5000Da PEG)	680	0.5ml, 1.0ml (50 OD)

NOTE: X* is either -25 for 0.5ml or -50 for 1.0ml format.