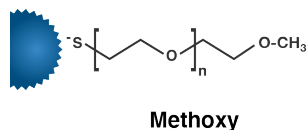


PRODUCT DATA SHEET

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

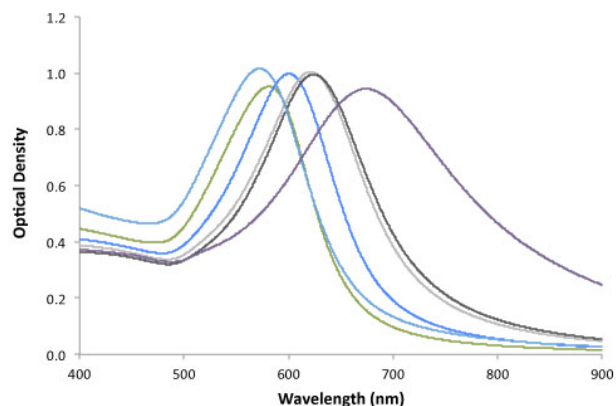
- Superior size distribution compared to the leading competitor; available from 50nm to 100nm.
- Precisely engineered surface with low protein binding characteristics.

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.

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.