Transferrin Gold NanoUrchins
PRODUCT DATA SHEET

Transferrin Gold NanoUrchins

Description

Transferrin is an iron-binding glycoprotein found in the blood plasma of vertebrates. It is a key component in iron transport and metabolism throughout an organism.

Abvigen Transferrin conjugated gold NanoUrchins utilize holo-transferrin, which is the iron-saturated form, meaning that they can be readily taken up by cells through endocytosis. This allows for easier visualization of cellular uptake of iron using dark field microscopy, and electron microscopy.

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

Website: www.abvigen.com **Phone: +1 929-202-3014 Email:** info@abvigenus.com

Product List

Cat No	Product Name	Concentration	Size
ABTGNU-50	Transferrin Gold NanoUrchins, 50 nm	OD 3	0.5 mL
ABTGNU-60	Transferrin Gold NanoUrchins, 60 nm	OD 3	0.5 mL
ABTGNU-70	Transferrin Gold NanoUrchins, 70 nm	OD 3	0.5 mL
ABTGNU-80	Transferrin Gold NanoUrchins, 80 nm	OD 3	0.5 mL
ABTGNU-90	Transferrin Gold NanoUrchins, 90 nm	OD 3	0.5 mL
ABTGNU-100	Transferrin Gold NanoUrchins, 100 nm	OD 3	0.5 mL

Characteristics

Core diameter: 50 ~ 100 nm

Concentration: 0.15 mg/ml (@ OD=3)

Conjugated Protein: Holo-Transferrin (Purified from Human Serum)

Storage Buffer: 10 mM PBS (pH 7.4), 20% glycerol (v/v), 1% BSA

Working Dilution: 1:10 – 1:100 (application dependent, optimization might be required)

Advantages

Readily taken up by cells through endocytosis.

Provides a permanent label.

Applications

Transferrin gold nanourchin conjugates are suitable for use in cell uptake studies and can be detected using light microscopy (requires silver enhancement), darkfield microscopy, and electron microscopy.

Storage

Store undiluted in storage buffer at 2-8°C. Stable for 4 months if stored as specified.

DO NOT FREEZE.

Storage of conjugate at working dilution may result in performance loss.

Standard Immunogold Dot-Blot Protocol

(Adapted from Moeremans et al.)

1. Spot one microlitre drops of a serial dilution of your protein (1 ug-1 ng) in PBS supplemented with 0.5 ug/ml of BSA on nitrocellulose or PVDF membrane.
2. Let protein drops dry into the membrane.
3. Block Membrane for 30 min using 1% (w/v) dry milk in 1X PBS at room temperature.
4. Incubate with primary antibody for 2 h at room temperature.
5. Wash membrane 3x5 min with blocking solution prepared as above.
6. Incubate for 2 h (or longer for increased sensitivity) with secondary gold conjugate diluted 1:10 (OD=0.3) times with blocking solution (0.2% Blocking Solution).
7. Wash 3x5 min as above.
8. Dry membrane and record data.
9. (OPTIONAL) Proceed with silver enhancement to improve sensitivity.

Notes

This product is for R&D use only, not for drug, household, or other uses.

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Ordering Information

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