

## Certificate of Analysis

[www.tocris.com](http://www.tocris.com)

Product Name: Ep23, 5'-DY647

Catalog No.: 6102

Batch No.: 1

### 1. PHYSICAL AND CHEMICAL PROPERTIES

**Batch Molecular Formula:** C<sub>218</sub>H<sub>259</sub>F<sub>13</sub>N<sub>66</sub>O<sub>132</sub>P<sub>20</sub>  
**Batch Molecular Weight:** 6782.21  
**Physical Appearance:** lyophilised film  
**Storage:** Store at -20°C

### 2. ANALYTICAL DATA

**HPLC:** Shows 95% purity  
**Mass Spectrum:** Consistent with structure

Caution - Not Fully Tested • Research Use Only • Not For Human or Veterinary Use

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**Product Name:** Ep23, 5'-DY647**Catalog No.:** 6102**Batch No.:** 1**Description:**

High affinity fluorescently tagged aptamer for EpCam ( $K_d = 39.42$  nM in HT29 cells). Efficiently internalized upon binding to EpCAM. Exhibits rapid penetration of tumorspheres in vitro, as well as superior penetration, accumulation and retention in tumor xenografts in vivo than an antibody to the same target. For optimal binding aptamers require refolding into their tertiary structure prior to use. Please refer to the protocol for information regarding refolding and aptamer use in unfixed cell imaging and flow cytometry. Please see product datasheet on [www.tocris.com](http://www.tocris.com) for full description.

**Physical and Chemical Properties:**Batch Molecular Formula:  $C_{218}H_{259}F_{13}N_{66}O_{132}P_{20}$ 

Batch Molecular Weight: 6782.21

Physical Appearance: lyophilised film

**Solubility & Usage Info:**

This product is supplied as a lyophilized solid and may be very hard to visualize. Solutions should be made by adding solvent directly to the vial. The vial should then be vortexed vigorously to ensure the product has completely dissolved.

**Licensing Information:**

Sold under license from the patent holder, Deakin University, Australia.

**References:**

**Xiang *et al*** (2015) Superior performance of aptamer in tumor penetration over antibody: implication of aptamer-based theranostics in solid tumors. *Theranostics*. **5** 1083. PMID: 26199647.

**Shigdar *et al*** (2013) The use of sensitive chemical antibodies for diagnosis: detection of low levels of EpCAM in breast cancer. *PLoS One*. **8** e57613. PMID: 23460885.

**Shigdar *et al*** (2011) RNA aptamer against a cancer stem cell marker epithelial cell adhesion molecule. *Cancer Sci*. **102** 991. PMID: 21281402.

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