

# Produktinformation



Forschungsprodukte & Biochemikalien



Zellkultur & Verbrauchsmaterial



Diagnostik & molekulare Diagnostik



Laborgeräte & Service

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# Lieferung & Zahlungsart

siehe unsere Liefer- und Versandbedingungen

# Zuschläge

- Mindermengenzuschlag
- Trockeneiszuschlag
- Gefahrgutzuschlag
- Expressversand

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# EMSY siRNA (h): sc-45565



The Power to Question

#### **BACKGROUND**

EMSY interacts with BRCA2 and plays a role in chromatin remodeling. This interaction has been confirmed in HeLa cells. Overexpression of EMSY strongly correlates with amplification in sporadic breast cancer and higher grade ovarian cancer. The EMSY gene is amplified in 18% of breast cancer cell lines. EMSY amplification is highly correlated with DNA amplification in both cell lines and primary tumors. This amplification is a general sign of poor prognosis and shortened disease-free survival time. EMSY from a wide variety of species has a conserved 80 amino acid sequence at the N-terminus. In irradiated MEFs (mouse embryonic fibroblasts), EMSY was found to migrate to damaged DNA.

### **REFERENCES**

- Haber, D.A., et al. 2003. The BRCA2-EMSY connection: implications for breast and ovarian tumorigenesis. Cell 115: 507-508.
- Hughes-Davies, L., et al. 2003. EMSY links the BRCA2 pathway to sporadic breast and ovarian cancer. Cell 115: 523-535.
- Rodriguez, C., et al. 2004. Amplification of the BRCA2 pathway gene EMSY in sporadic breast cancer is related to negative outcome. Clin. Cancer Res. 10: 5785-5791.
- 4. Yao, J., et al. 2004. EMSY links breast cancer gene 2 to the "Royal Family". Breast Cancer Res. 6: 201-203.
- Livingston, D.M., et al. 2004. EMSY, a BRCA2 partner in crime. Nat. Med. 10: 127-128.
- Benusiglio, P.R., et al. 2005. Common variation in EMSY and risk of breast and ovarian cancer: a case-control study using HapMap tagging SNPs. BMC Cancer 5: 81.

### **CHROMOSOMAL LOCATION**

Genetic locus: C11orf30 (human) mapping to 11q13.5.

#### **PRODUCT**

EMSY siRNA (h) is a pool of 3 target-specific 19-25 nt siRNAs designed to knock down gene expression. Each vial contains 3.3 nmol of lyophilized siRNA, sufficient for a 10  $\mu\text{M}$  solution once resuspended using protocol below. Suitable for 50-100 transfections. Also see EMSY shRNA Plasmid (h): sc-45565-SH and EMSY shRNA (h) Lentiviral Particles: sc-45565-V as alternate gene silencing products.

For independent verification of EMSY (h) gene silencing results, we also provide the individual siRNA duplex components. Each is available as 3.3 nmol of lyophilized siRNA. These include: sc-45565A, sc-45565B and sc-45565C.

#### **RESEARCH USE**

For research use only, not for use in diagnostic procedures.

#### **PROTOCOLS**

See our web site at www.scbt.com for detailed protocols and support products.

#### STORAGE AND RESUSPENSION

Store lyophilized siRNA duplex at -20° C with desiccant. Stable for at least one year from the date of shipment. Once resuspended, store at -20° C, avoid contact with RNAses and repeated freeze thaw cycles.

Resuspend lyophilized siRNA duplex in 330  $\mu$ l of the RNAse-free water provided. Resuspension of the siRNA duplex in 330  $\mu$ l of RNAse-free water makes a 10  $\mu$ M solution in a 10  $\mu$ M Tris-HCl, pH 8.0, 20 mM NaCl, 1 mM EDTA buffered solution.

#### **APPLICATIONS**

EMSY siRNA (h) is recommended for the inhibition of EMSY expression in human cells.

#### **SUPPORT REAGENTS**

For optimal siRNA transfection efficiency, Santa Cruz Biotechnology's siRNA Transfection Reagent: sc-29528 (0.3 ml), siRNA Transfection Medium: sc-36868 (20 ml) and siRNA Dilution Buffer: sc-29527 (1.5 ml) are recommended. Control siRNAs or Fluorescein Conjugated Control siRNAs are available as 10  $\mu$ M in 66  $\mu$ l. Each contain a scrambled sequence that will not lead to the specific degradation of any known cellular mRNA. Fluorescein Conjugated Control siRNAs include: sc-36869, sc-44239, sc-44240 and sc-44241. Control siRNAs include: sc-37007, sc-44230, sc-44231, sc-44232, sc-44234, sc-44235, sc-44236, sc-44237 and sc-44238.

#### **GENE EXPRESSION MONITORING**

EMSY (E-9): sc-515469 is recommended as a control antibody for monitoring of EMSY gene expression knockdown by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000) or immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500).

To ensure optimal results, the following support reagents are recommended: 1) Western Blotting: use m-lgG $\kappa$  BP-HRP: sc-516102 or m-lgG $\kappa$  BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), Cruz Marker<sup>TM</sup> Molecular Weight Standards: sc-2035, UltraCruz<sup>®</sup> Blocking Reagent: sc-516214 and Western Blotting Luminol Reagent: sc-2048. 2) Immunofluorescence: use m-lgG $\kappa$  BP-FITC: sc-516140 or m-lgG $\kappa$  BP-PE: sc-516141 (dilution range: 1:50-1:200) with UltraCruz<sup>®</sup> Mounting Medium: sc-24941 or UltraCruz<sup>®</sup> Hard-set Mounting Medium: sc-359850.

### **RT-PCR REAGENTS**

Semi-quantitative RT-PCR may be performed to monitor EMSY gene expression knockdown using RT-PCR Primer: EMSY (h)-PR: sc-45565-PR (20  $\mu$ l). Annealing temperature for the primers should be 55-60° C and the extension temperature should be 68-72° C.

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