Product Data Sheet

Product Name:	survivin (baculoviral IAP repeat-containing protein 5) (21-28)
Cat. No.:	GP10034

Chemical Properties

Cas. No.			
SMILES	NC(C(C)O)C(NC(CC1=CC=CC=C1)C(NC(CCCCN)C(NC(CC(N)=O)C(NC(CC2=CNC3=C2C=CC=C3)C(N4C(C(NC(CC5=CC=CC=C5)C(NC		
Formula	$C_{54}H_{73}N_{11}O_{11}$	M.Wt	1052.
Solubility	≥ 105.2mg/mL in DMSO	Storage	Store
General tips	For obtaining a higher solubility , please warm the tube at 37 ℃ and shake it in the ultrasonic bath for a while.Stock solution can be		
Shipping Condition	Evaluation sample solution : ship with blue ice All other available size: ship with RT , or blue ice upon request.		
Structure	survivin (baculoviral IAP repeat-containing protein 5) (21-28)		

Background

Survivin (baculoviral inhibitor of apoptosis IAP repeat-containing protein-5) is a member of the IAP gene family, which has been implicated in both inhibition of apoptosis and mitosis regulation[1]. Survivin is one of the most uniformly up-regulated genes in tumor tissues compared with healthy tissues[2]. High survivin expression in the primary tumor is almost invariably associated with poor patient prognosis in many cancer types. Survivin relates to poor disease outcome in a variety of tumors, i.e., neuroblastoma[3], colorectal cancer[4], non-small-cell lung cancers[5], B-cell lymphoma[6], T-cell leukemia[7], hepatocellular carcinoma, esophageal carcinoma, rectal cancer, glioma, bladder cancer, soft tissue sarcoma and astrocytic tumors.

Survivin mRNA, as measured by quantitative RT-PCR in the primary tumor, has strong and independent prognostic value in human breast cancer. Survivin mRNA concentrations in the tumor can be used to classify breast cancer patients into different risk groups. [8] Cells that are unresponsive to apoptotic triggers will also be more resistant to cytotoxic treatments, as are cells that overexpress survivin[9].

References:
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3.Adida C, Berrebi D, Peuchmaur M, Reyes-Mugica M, Altieri DC. Anti-apoptosis gene, survivin, and prognosis of neuroblastoma. Lancet 1998; 351:882-3.
4.Kawasaki H, Altieri DC, Lu CD, Toyoda M, Tenjo T, Tanigawa N. Inhibition of apoptosis by survivin predicts shorter survival rates in colorectal cancer. Cancer Res 1998; 58:5071-4.
5.Monzo M, Rosell R, Felip E, Astudillo J, Sanchez JJ, Maestre J, et al. A novel anti-apoptosis gene: Re-expression of survivin messenger RNA as a prognosis marker in non-small-cell lung cancers. J Clin Oncol 1999; 17:2100 -4.
6.Adida C, Haioun C, Gaulard P, Lepage E, Morel P, Briere J, et al. Prognostic significance of survivin expression in diffuse large B-cell lymphomas. Blood 2000; 96:1921-5.
7.Nakayama K, Kamihira S. Survivin an important determinant for prognosis in adult T-cell leukemia: a novel biomarker in practical hemato-oncology. Leuk Lymphoma 2002; 43:2249 -55.
8.Paul N. Span, Fred C.G.J. Sweep et al. Survivin Is an Independent Prognostic Marker for Risk Stratification of Breast Cancer Patients. Clinical Chemistry 50:11; 1986 -1993 (2004)
9.Zaffaroni N, Daidone MG. Survivin expression and resistance to anticancer treatments: perspectives for new therapeutic interventions. Drug Resist Updat 2002; 5:65-72.

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