Product Data Sheet

Product Name: signal transducer and activator of transcription 6 fragment
Cat. No.: GP10145

Chemical Properties

Cas. No.			
SMILES	OCC(N)C(NC(CC1=CC=C(O)C=C1)C(NC(CC2=CNC3=C2C=CC=C3)C(NC(CO)C(NC(CC(O)=O)C(NC(CCCNC(N)=N)C(NC(CC(C)C)C(NC((		
Formula	$C_{54}H_{81}N_{13}O_{15}$	M.Wt	
Solubility	≥ 115.2mg/mL in DMSO	Storage	
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	signal transducer and activator of transcription 6 fragment		

Background

Signal transducer and activator of transcription 6 fragment, (C54H81N13O15), a peptide with the sequence H2N-Ser-Tyr-Trp-Ser-Asp-Arg-Leu-Ile-Ile-OH, MW= 1152.3. STAT6 is a member of the STAT family of transcription factors[1]. In response to cytokines and growth factors, STAT family members are phosphorylated by the receptor associated kinases, and then form homo- or heterodimers that translocate to the cell nucleus where they act as transcription activators[2]. This protein plays a central role in exerting IL4 mediated biological responses[3]. It is found to induce the expression of BCL2L1/BCL-X(L), which is responsible for the anti-apoptotic activity of IL4. Knockout studies in mice suggested the roles of this gene in differentiation of T helper 2 (Th2), expression of cell surface markers, and class switch of immunoglobulins.

References:
1. Leek JP, Hamlin PJ, BellSM, LenchNJ(1997). "Assignment of the STAT6 gene (STAT6) to human chromosome band 12q13 by in situ hybridization". Cytogenet. Cell Genet. 79 (3–4): 208–9.
2. Kisseleva T, Bhattacharya S, Braunstein J, Schindler CW (2002). "Signaling through the JAK/STAT pathway, recent advances and future challenges". Gene 285 (1–2): 1–24.
3. Shimoda K, van Deursen J, Sangster MY, et al. (1996). "Lack of IL-4-induced Th2 response and IgE class switching in mice with disrupted Stat6 gene". Nature 380 (6575): 630–3.

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