
IQCG Antibody Blocking Peptide

Catalog Number: bs-9022P

Activity: Not tested

Purification: HPLC

Storage: Shipped at 4°C. Stored at -20°C for one year. Avoid repeated freeze/thaw cycles.

Background: IQCG is a 443 amino acid protein containing one IQ domain. Widely distributed in nature, the IQ domain forms an amphiphilic seven-turn α -helix capable of binding calmodulin in a Ca^{2+} -independent manner. The level of intracellular calcium is tightly regulated in all eukaryotic cells. A modest increase in this level can result in a myriad of physiological responses, most of which are mediated by calmodulin (CaM), the universal calcium sensor. In acute T-lymphoid/myeloid leukemia, IQCG forms a complex with Nup98, an O-linked glycoprotein and a component of the nuclear pore complex. NUP98-IQCG complex bind co-activators and/or co-repressors, which suggest a role in transcriptional regulation. Nup98-IQCG complex inhibits 32Dcl3 cell apoptosis induced by Arabinofuranosylcytosine (Ara-C) and partially blocks granulocyte differentiation induced by G-CSF. IQCG exists as two isoforms due to alternatively splicing events.