YM-155
Item No. 11490

CAS Registry No.: 781661-94-7
Formal Name: 4,9-dihydro-1-(2-methoxyethyl)2-methyl-4,9-dioxo-3-(2-pyrazinylmethyl)-1H-naphth[2,3-d]imidazolium, bromide
Synonym: Sepantronium bromide
MF: C_{34}H_{49}N_{3}O_{5} • Br
FW: 443.3
Purity: ≥98%
Stability: ≥2 years at -20°C
Supplied as: A crystalline solid
UV/Vis.: λ_{max} 246, 252, 271, 344, 350 nm

Laboratory Procedures
For long term storage, we suggest that YM-155 be stored as supplied at -20°C. It should be stable for at least two years. YM-155 is supplied as a crystalline solid. A stock solution may be made by dissolving the YM-155 in the solvent of choice. YM-155 is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide, which should be purged with an inert gas. The solubility of YM-155 in these solvents is approximately 1, 10, and 3 mg/ml, respectively.

Further dilutions of the stock solution into aqueous buffers or isotonic saline should be made prior to performing biological experiments. Ensure that the residual amount of organic solvent is insignificant, since organic solvents may have physiological effects at low concentrations. Organic solvent-free aqueous solutions of YM-155 can be prepared by directly dissolving the crystalline solid in aqueous buffers. The solubility of YM-155 in PBS, pH 7.2, is approximately 10 mg/ml. We do not recommend storing the aqueous solution for more than one day.

Survivin, a member of the inhibitor of apoptosis (IAP) family, plays an important role in drug resistance and cancer cell survival in many types of cancer. YM-155 is a novel small molecule that suppresses transactivation of survivin through direct binding to its promoter.1 It selectively suppresses expression of survivin and induces apoptosis in p53-deficient cancer cells in vitro at 10 nM.2 At concentrations up to 100 nM, YM-155 has little effect on expression levels of other IAP- or Bcl-2-related proteins.2 YM-155 exerts anti-tumor effects in various in vivo cancer models, including prostate, pancreatic, and lung cancer.2,3

References

Related Products
For a list of related products please visit: www.caymanchem.com/catalog/11490

WARNING: THIS PRODUCT IS FOR LABORATORY RESEARCH ONLY; NOT FOR ADMINISTRATION TO HUMANS. NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

SAFETY DATA
This material should be considered hazardous until information to the contrary becomes available. Do not ingest, swallow, or inhale. Do not get in eyes, on skin, or on clothing. Wash thoroughly after handling. This information contains some, but not all, of the information required for the safe and proper use of this material. Before use, the user must review the complete Safety Data Sheet, which has been sent via email to your institution.

WARRANTY AND LIMITATION OF REMEDY
Cayman Chemical Company makes no warranty or guarantee of any kind, whether written or oral, expressed or implied, including without limitation, any warranty of fitness for a particular purpose, suitability and merchantability, which extends beyond the description of the chemicals hereof. Cayman warrants only to the original customer that the material will meet our specifications at the time of delivery.

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