# AV-153

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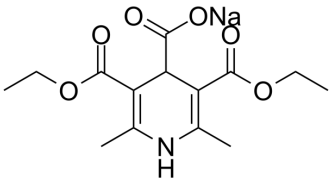
| **Cat. No.:** | HY-135218 |
| **CAS No.:** | 27296-05-5 |
| **Molecular Formula:** | $C_{14}H_{18}NNaO_6$ |
| **Molecular Weight:** | 319.29 |
| **Target:** | DNA/RNA Synthesis |
| **Pathway:** | Cell Cycle/DNA Damage |
| **Storage:** | Please store the product under the recommended conditions in the Certificate of Analysis. |



## BIOLOGICAL ACTIVITY

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| **Description** | AV-153, a 1,4-dihydropyridine (1,4-DHP) derivative, is an antimutagenic. AV-153 intercalates to DNA in a single strand break and reduces DNA damage, stimulates DNA repair in human cells in vitro. AV-153 interacts with thymine and cytosine and has an influence on poly(ADP)ribosylation. AV-153 has anti-cancer activity[1][2][3]. |
| **In Vitro** | AV-153 causes $IC_{50}$s for Raji and HL-60 cells of 14.9 mM and 10.3 mM, respectively[1].<br>AV-153 (1 nM to 10 μM; 3 hours) reduces the level of spontaneously arising DNA single-strand breaks (SSBs) in peripheral blood lymphocytes or HL-60 cells by 13-67%[1].<br>MCE has not independently confirmed the accuracy of these methods. They are for reference only. |

## REFERENCES

[1]. Nadezhda I Ryabokon, et al. A 1,4-dihydropyridine Derivative Reduces DNA Damage and Stimulates DNA Repair in Human Cells in Vitro. Mutat Res. 2005 Nov 10;587(1-2):52-8.

[2]. E Buraka, et al. DNA-binding Studies of AV-153, an Antimutagenic and DNA Repair-Stimulating Derivative of 1,4-dihydropiridine. Chem Biol Interact. 2014 Sep 5;220:200-7.

[3]. Lidija Milkovic, et al. Antioxidative 1,4-Dihydropyridine Derivatives Modulate Oxidative Stress and Growth of Human Osteoblast-Like Cells In Vitro. Antioxidants (Basel). 2018 Sep 19;7(9):123.



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