

## Atezolizumab

<b>Cat. No.:</b>	HY-P9904
<b>CAS No.:</b>	1380723-44-3
<b>Molecular Weight:</b>	144590.5
<b>Target:</b>	PD-1/PD-L1; Apoptosis; Autophagy
<b>Pathway:</b>	Immunology/Inflammation; Apoptosis; Autophagy
<b>Storage:</b>	Please store the product under the recommended conditions in the Certificate of Analysis.

### BIOLOGICAL ACTIVITY

<b>Description</b>	Atezolizumab (MPDL3280A) is a selective humanized monoclonal IgG1 antibody against programmed death ligand 1 (PD-L1), used for cancer research.
<b>In Vitro</b>	<p>Atezolizumab (0, 2.5, 5, 10, 20, and 40 µg/ml; 24 hours; HOS and 143B cells) inhibits proliferation and induces immune-independent apoptosis of osteosarcoma cells<sup>[1]</sup>.</p> <p>Atezolizumab impairs the function of mitochondria to cause the imbalance between oxidants and antioxidants. Atezolizumab induces mitochondria-related apoptosis of osteosarcoma cells by activating JNK pathway. Atezolizumab (10 µg/ml; 24 hours; HOS and 143B cells) induces autophagy in osteosarcoma cells<sup>[1]</sup>.</p> <p>MCE has not independently confirmed the accuracy of these methods. They are for reference only.</p>

### CUSTOMER VALIDATION

- Cell Rep. 2022 Feb 8;38(6):110349.
- Inflammation. 2021 Aug;44(4):1441-1451.
- Biomed Mater. 2021 Mar 8;16(4).
- Mol Imaging Biol. 2020 Aug;22(4):842-853.
- EJNMMI Res. 2020 Jun 15;10(1):64.

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### REFERENCES

- [1]. Cha E, et al. PD-L1 inhibition with MPDL3280A for solid tumors. *Semin Oncol.* 2015 Jun;42(3):484-7.
- [2]. Liu Z, et al. Targeting autophagy enhances atezolizumab-induced mitochondria-related apoptosis in osteosarcoma. *Cell Death Dis.* 2021;12(2):164. Published 2021 Feb 8.

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**Caution: Product has not been fully validated for medical applications. For research use only.**

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