

## Small Molecules

ME0328

PARP-3 inhibitor

Catalog #100-0271  
100-0272

1 mg  
5 mg



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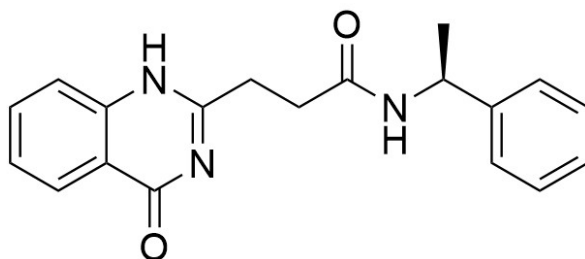
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## Product Description

ME0328 is a cell-permeable and selective inhibitor of poly(ADP-ribose) polymerase 3 (PARP-3;  $IC_{50} = 0.89 \mu M$ ; Lindgren et al.). PARP-3 is required for stabilization of the mitotic spindle and crucial for mitotic progression (Sharif-Askari et al.).

Molecular Name:	ME0328
Alternative Names:	Not applicable
CAS Number:	1445251-22-8
Chemical Formula:	$C_{19}H_{19}N_3O_2$
Molecular Weight:	321.4 g/mol
Purity:	$\geq 98\%$
Chemical Name:	3,4-dihydro-4-oxo-N-[(1S)-1-phenylethyl]-2-quinazolinepropanamide
Structure:	



## Properties

Physical Appearance:	A crystalline solid
Storage:	Product stable at $-20^{\circ}C$ as supplied. Protect from prolonged exposure to light. For long-term storage store with a desiccant. Stable as supplied for 12 months from date of receipt.
Solubility:	<ul style="list-style-type: none"><li>· DMSO <math>\leq 50</math> mM</li><li>· Absolute ethanol <math>\leq 620 \mu M</math></li></ul> For example, to prepare a 10 mM stock solution in DMSO, resuspend 1 mg in 311 $\mu L$ of DMSO.

Prepare stock solution fresh before use. Information regarding stability of small molecules in solution has rarely been reported, however, as a general guide we recommend storage in DMSO at  $-20^{\circ}C$ . Aliquot into working volumes to avoid repeated freeze-thaw cycles. The effect of storage of stock solution on compound performance should be tested for each application.

Compound has low solubility in aqueous media. For use as a cell culture supplement, stock solution should be diluted into culture medium immediately before use. Avoid final DMSO concentration above 0.1% due to potential cell toxicity.

## Published Applications

### CANCER RESEARCH

· Enhances vinorelbine-induced microtubule destabilization, leading to cell cycle arrest and apoptosis in breast cancer cells (Sharif-Askari et al.).

## References

Lindgren AEG et al. (2013) PARP inhibitor with selectivity toward ADP-ribosyltransferase ARTD3/PARP3. ACS Chem Biol 8(8): 1698–703.  
Sharif-Askari B et al. (2018) PARP3 inhibitors ME0328 and olaparib potentiate vinorelbine sensitization in breast cancer cell lines. Breast Cancer Res Treat 172(1): 23–32.

## Related Small Molecules

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**This product is hazardous. Please refer to the Safety Data Sheet (SDS).**

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