

## Olaparib

货号: O2345

储存条件: 粉末-20°C可保存3年; 液体-80°C可保存12月。

## 产品描述

PARP1, also called as Poly(ADP-ribose) polymerase, is involved in the signaling of DNA damage. It can recognize and bind DNA single or double-strand breaks. Thus it possesses various cellular function, including regulation of apoptosis and chromosome stability, gene amplification and transcription, as well as cell division and differentiation. PARP-2 is the closest homolog of PARP1 (~62% similarity in catalytic domain) and compensates for PARP-1 activity in DNA single-strand break repair. Olaparib, also called as AZD2281 or Ku-0059436, one of the best investigated third-generation PARP inhibitors, can potently inhibit both PARP-1 (IC<sub>50</sub>=5nM) and PARP-2(IC<sub>50</sub>=1nM). BRCA1-deficient cell lines, such as MDA-MB-436 and HCC1937, were hypersensitive to olaparib than BRCA1- and BRCA2-proficient cell lines (Hs578T, MDA-MB-231 and T47D). Also olaparib shows good pharmacokinetic profiles, oral bioavailability, as well as activity in vivo. These facilitate olaparib approved for use in recurrent ovarian cancer and germline BRCA HER2-negative metastatic breast cancer.

## 作用机制

Olaparib occupies the NAD binding pocket at the catalytic site, which has been proposed to trap PARP1 on DNA.

## 产品信息

CAS号	763113-22-0	
分子式	C <sub>24</sub> H <sub>23</sub> FN <sub>4</sub> O <sub>3</sub>	
分子量	434.46	
别名	AZD-2281; KU 0059436	
溶解度	DMSO	100.0 mg/mL (230.2 mM)
	Water	insoluble

