# Product Data Sheet

Product Name: ABS-752 hydrochloride
Cat. No.: GC81777

## Chemical Properties

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|---|---|---|---|
| Cas. No. | 2922884-90-8 | | |
| Formula | $C_{14}H_{15}ClFN_3O_3$ | M.Wt | 327.74 |
| Solubility | DMSO: 25 mg/mL (76.28 mM; Need ultrasonic) | Storage | Store at 4°C, sealed storage, away from moisture |
| General tips | For obtaining a higher solubility , please warm the tube at 37 °C and shake it in the ultrasonic bath for a while.Stock solution can be stored below -20°C for several months. | | |
| Shipping Condition | Evaluation sample solution : ship with blue ice All other available size: ship with RT , or blue ice upon request. | | |
| Structure | | | |

## Background

ABS-752 hydrochloride is an orally active prodrug targeting CRBN-modulating molecular glue with selectivity in protein degradation. ABS-752 hydrochloride preferentially degrades GSPT1 and induces cytotoxicity through this degradation, while it also degrades NEK7, SALL4 and CK1α, with weaker degradation potency against CK1α. As a prodrug, ABS-752 hydrochloride requires metabolic activation to ABT-002 to form the active complex; VAP-1 mediates its conversion to an aldehyde intermediate. ABS-752 hydrochloride induces cell death, reduces cell viability, and exhibits antitumor activity, leading to regression and inhibition of tumor growth. ABS-752 hydrochloride shows no

cytotoxicity in primary human hepatocytes. ABS-752 hydrochloride can be used in the research of hepatocellular carcinoma [1].

In Vivo, ABS-752 (1-10 mg/kg; p.o.; BID; 14 days) hydrochloride exhibits exceptional antitumor efficacy in the Hep3B xenograft model, with complete tumor regression observed at the 10 mg/kg BID dose[1]. ABS-752 (100 mg/kg; p.o.; BID; 20-21 days) hydrochloride induces tumor growth inhibition in 80% of tested HCC PDX models, with >50% TGI in four models and complete regression in one model at the 100 mg/kg BID dose[1]. ABS-752 (0.1 mg/kg; single dose) hydrochloride induces significant degradation of GSPT1 and NEK7 in non-human primates at a 0.1 mg/kg dose, with ~80% GSPT1 degradation observed 6 hours post-dose[1].

In Vitro, ABS-752 (72 h) hydrochloride exerts cytotoxic/cytostatic activity in 13 of 19 tested HCC cell lines, reducing viability by at least 50%[1]. ABS-752 (1-50 μM; 72 h) hydrochloride reduces viability in wild-type Hep3B cells, but has no effect on Hep3B GSPT1G575N cells, demonstrating that GSPT1 degradation drives its cytotoxic activity[1]. ABS-752 (0.1 nM-30 μM; 72 h) hydrochloride has viability-reducing activity in Hep3B cells that is dependent on VAP-1[1]. ABS-752 (6 h, 24 h) hydrochloride potently degrades GSPT1 ($DC_{50}$ = 1 nM at 24 h), NEK7 ($DC_{50}$ = 9 nM at 24 h), CK1α ($DC_{50}$ = 35 nM at 24 h) in Hep3B cells, and SALL4 ($DC_{50}$ = 40 nM at 24 h) in Kelly cells, with GSPT1 as the primary target showing near-complete degradation at early time points[1]. ABS-752 (0.1 μM; 6 h) hydrochloride preferentially degrades GSPT1, with greater degradation of NEK7 than CK1α[1]. ABS-752 (1-10 μM) hydrochloride does not form a biochemical ternary complex with CRBN and GSPT1, NEK7, CK1α, or IKZF1, but shows recruitment activity with SALL4[1]. ABS-752 (10 μM; 0-20 h) hydrochloride is converted to the aldehyde metabolite ABT-971 by recombinant mVAP-1[1]. ABS-752 (125-2500 μM; 15 min) hydrochloride is oxidized by recombinant human VAP-1 with a Km of 674 μM[1].

References:
[1]. Glaza P, et al. Targeted degradation of GSPT1 and NEK7 by a molecular glue prodrug for treatment of HCC. Communications chemistry. 2025 Aug 14;8(1):247.