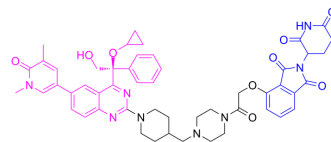


## EBET-1055

<b>Cat. No.:</b>	HY-161346
<b>Molecular Formula:</b>	C <sub>51</sub> H <sub>54</sub> N <sub>8</sub> O <sub>9</sub>
<b>Molecular Weight:</b>	923.02
<b>Target:</b>	ADC Cytotoxin; Epigenetic Reader Domain
<b>Pathway:</b>	Antibody-drug Conjugate/ADC Related; Epigenetics
<b>Storage:</b>	Please store the product under the recommended conditions in the Certificate of Analysis.



## BIOLOGICAL ACTIVITY

<b>Description</b>	EBET-1055 is a bromodomain and extra-terminal (BET) protein degrader (EBET) composed of a BET inhibitor (EBET-590, HY-161387), an E3 ubiquitin ligase ligand and connectors. EBET-1055 effectively inhibits the growth of pancreatic ductal adenocarcinoma (PDAC). EBET-1055 also simultaneously modulates cancer-associated fibroblast (CAF) activity, upregulating all reporter gene activities in organoid co-cultures <sup>[1]</sup> .								
<b>In Vitro</b>	<p>EBET-1055 (1 nM, 10 nM; 2 d) inhibits CAF-induced IL-6 and LIF secretion when co-cultured with mouse CAF and PC-3 or PC-42 cancer cells<sup>[1]</sup>. EBET-1055 has potential anti-inflammatory or anti-fibrotic activity. STAT3 signaling mediates the inflammatory CAF (iCAF) phenotype, and SMAD signaling mediates the myofibroblast CAF (myCAF) phenotype; and EBET-1055 (1-100 nM; 24 h) may inhibit the interaction of BRD proteins with STAT3 and SMAD3. It inhibits myofibroblast differentiation and reduces the phosphorylation levels of SMAD3 and STAT3 in mouse fibrotic kidneys<sup>[1]</sup>.</p> <p>MCE has not independently confirmed the accuracy of these methods. They are for reference only.</p> <p>Western Blot Analysis<sup>[1]</sup></p> <table border="1"> <tr> <td>Cell Line:</td><td>PC-3 cells or mouse CAFs</td></tr> <tr> <td>Concentration:</td><td>0.1, 1, 10, 100 nM</td></tr> <tr> <td>Incubation Time:</td><td>24 h</td></tr> <tr> <td>Result:</td><td>Decreased the phosphorylation levels of STAT3Y705, SMAD2S465/467, and SMAD3S423/425 24 h after addition.</td></tr> </table>	Cell Line:	PC-3 cells or mouse CAFs	Concentration:	0.1, 1, 10, 100 nM	Incubation Time:	24 h	Result:	Decreased the phosphorylation levels of STAT3Y705, SMAD2S465/467, and SMAD3S423/425 24 h after addition.
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## REFERENCES

[1]. Nakazawa Y, et al. Delivery of a BET protein degrader via a CEACAM6-targeted antibody-drug conjugate inhibits tumour growth in pancreatic cancer models. Nat Commun. 2024 Mar 11;15(1):2192.

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

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