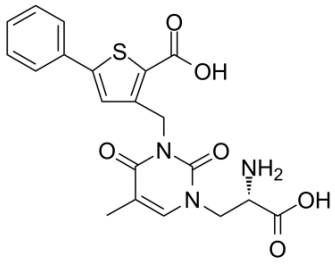
UBP316

Cat. No.:	HY-107601
CAS No.:	936095-50-0
Molecular Formula:	$C_{20}H_{19}N_3O_6S$
Molecular Weight:	429.45
Target:	iGluR
Pathway:	Membrane Transporter/Ion Channel; Neuronal Signaling
Storage:	Please store the product under the recommended conditions in the Certificate of Analysis.



BIOLOGICAL ACTIVITY

Description	UBP316 (ACET) is a highly potent and selective kainate receptor GluK1 (GluR5) antagonist, with a K_b value of 1.4 nM. UBP316 is effective at blocking the depression of both field excitatory postsynaptic potentials (fEPSPs) and monosynaptically-evoked GABAergic transmission induced by ATPA, a GluK1 selective agonist[1].
IC_{50} & Target	Kb: 1.4 nM (GluK1)[1]
In Vitro	UBP316 is ineffective at GluK2 (GluR6) receptors at all concentrations tested (up to 100 μM) and had no effect at GluK3 (GluR7) when tested at 1 μM[1]. UBP316 (200 nM) reduces short-term facilitation of pre-synaptic calcium transients following repetitive spikes[1]. UBP316 effectively antagonises GluK1-mediated depression of excitatory transmission in CA1 region of the hippocampus in vitro[1]. UBP316 blocks induction of NMDA receptor-independent long-term potentiation (LTP)[1]. MCE has not independently confirmed the accuracy of these methods. They are for reference only.

REFERENCES

[1]. Sheila L Dargan, et al. ACET is a highly potent and specific kainate receptor antagonist: Characterisation and effects on hippocampal mossy fibre function. Neuropharmacology. 2009 Jan;56(1):121-30.

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

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