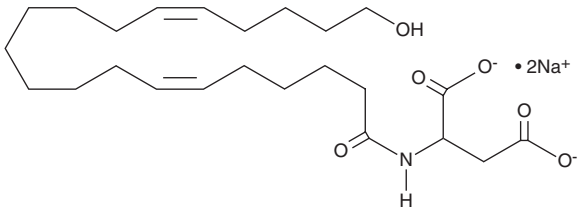
PRODUCT INFORMATION

AAA

Item No. 32733

Formal Name:	(20-hydroxyicosa-6Z,15Z-dienoyl) aspartate, disodium salt
MF:	$C_{24}H_{39}NO_6 \bullet 2Na$
FW:	483.5
Purity:	≥98%
Supplied as:	A crystalline solid
Storage:	-20°C
Stability:	≥2 years



Information represents the product specifications. Batch specific analytical results are provided on each certificate of analysis.

Laboratory Procedures

AAA is supplied as a crystalline solid. A stock solution may be made by dissolving the AAA in the solvent of choice, which should be purged with an inert gas. AAA is slightly soluble in DMSO.

Further dilutions of the stock solution into aqueous buffers or isotonic saline should be made prior to performing biological experiments. Ensure that the residual amount of organic solvent is insignificant, since organic solvents may have physiological effects at low concentrations. Organic solvent-free aqueous solutions of AAA can be prepared by directly dissolving the crystalline solid in aqueous buffers. The solubility of AAA in PBS, pH 7.2, is approximately 1 mg/ml. We do not recommend storing the aqueous solution for more than one day.

Description

AAA is an antagonist of G protein-coupled receptor 75 (GPR75).[2] It increases basal GPR75 protein levels and inhibits 20-HETE-induced reductions in GPR75 protein levels in PC3 cells. AAA (5 and 10 µM) also reduces 20-HETE-induced phosphorylation of EGFR, NF-κB, and Akt in, and cell migration of, PC3 cells. *In vivo*, AAA (10 mg/kg per day) reduces systolic blood pressure, albuminuria, renal angiotensin II levels, and cardiac hypertrophy in a Cyp1a1-Ren-2 transgenic rat model of malignant hypertension when administered prior to induction or after establishment of hypertension.[1]

References

1. Sedláková, L., Kikerlová, S., Husková, Z., *et al.* 20-Hydroxyeicosatetraenoic acid antagonist attenuates the development of malignant hypertension and reverses it once established: A study in Cyp1a1-Ren-2 transgenic rats. *Biosci. Rep.* **38(5)**, BSR20171496 (2018).
2.. Cárdenas, S., Colombero, C., Panelo, L., *et al.* GPR75 receptor mediates 20-HETE-signaling and metastatic features of androgen-insensitive prostate cancer cells. *Biochim. Biophys. Acta Mol. Cell Biol. Lipids* **1865(2)**, 158573 (2020).

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