SZABO SCANDIC

Part of Europa Biosite

Produktinformation

- Forschungsprodukte & Biochemikalien
- Zellkultur & Verbrauchsmaterial
- Diagnostik & molekulare Diagnostik
- Laborgeräte & Service

Weitere Information auf den folgenden Seiten!
See the following pages for more information!

Lieferung & Zahlungsart

siehe unsere Liefer- und Versandbedingungen

Zuschläge

- Mindermengenzuschlag
- Trockeneiszuschlag
- Gefahrgutzuschlag
- Expressversand

SZABO-SCANDIC HandelsgmbH

Quellenstraße 110, A-1100 Wien

T. +43(0)1 489 3961-0

F. +43(0)1 489 3961-7

mail@szabo-scandic.com

www.szabo-scandic.com

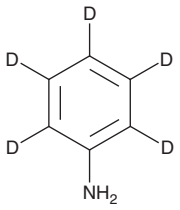
linkedin.com/company/szaboscandic

PRODUCT INFORMATION

Aniline-d_5

Item No. 35131

CAS Registry No.:	4165-61-1
Formal Name:	benzen-2,3,4,5,6-d_5-amine
Synonyms:	Aminobenzene-d_5, Phenyl-d_5 amine, Benzenamine-d_5
MF:	$C_6H_2D_5N$
FW:	98.2
Chemical Purity:	≥98% (Aniline)
Deuterium Incorporation:	≥99% deuterated forms (d_1-d_5); ≤1% d_0
UV/Vis.:	λ_{max}: 235 nm
Supplied as:	A liquid
Storage:	-20°C
Stability:	≥1 year



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

Laboratory Procedures

Aniline-d_5 is intended for use as an internal standard for the quantification of aniline by GC- or LC-MS. The accuracy of the sample weight in this vial is between 5% over and 2% under the amount shown on the vial. If better precision is required, the deuterated standard should be quantitated against a more precisely weighed unlabeled standard by constructing a standard curve of peak intensity ratios (deuterated *versus* unlabeled).

Aniline-d_5 is supplied as a liquid. A stock solution may be made by dissolving the aniline-d_5 in the solvent of choice, which should be purged with an inert gas. Aniline-d_5 is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide. The solubility of aniline-d_5 in these solvents is approximately 3, 10, and 15 mg/ml, respectively.

Description

Aniline is an aromatic amine that has been used as a starting material in the synthesis of a wide variety of precursors to dyes and pigments, rubber processing chemicals, and agricultural chemicals.[1] It increases the levels of reactive oxygen species (ROS) and malondialdehyde (MDA) and decreases the levels of glutathione and catalase, as well as the activity of superoxide dismutase (SOD), in primary rat hepatocytes when used at concentrations of 5 and 10 µg/ml.[2] Aniline (0.3 and 0.6% of the diet) induces splenic sarcomas in rats and is neurotoxic to rats when administered at doses of 750 and 1,000 mg/kg.[3,4] Formulations containing aniline have been used in the synthesis of pharmaceuticals.

References

1. Kahl, T., Schröder, K.-Q., Lawrence, F.R., *et al*. Aniline. *Ullmann's Encyclopedia of Industrial Chemistry*. 6th edition (2011).
2. Wang, Y., Gao, H., Na, X.-L., *et al*. Aniline induces oxidative stress and apoptosis of primary cultured hepatocytes. *Int. J. Environ. Res. Public Health* **13(12)**, 1188 (2016).
3. Goodman, D.G., Ward, J.M., and Reichardt, W.D. Splenic fibrosis and sarcomas in F344 rats fed diets containing aniline hydrochloride, *p*-chloroaniline, azobenzene, *o*-toluidine hydrochloride, 4,4'-sulfonyldianiline, or D & C red No. 9. *J. Natl. Cancer Inst*. **73(1)**, 265-273 (2019).
4. Okazaki, Y., Yamashita, K., Sudo, M., *et al*. Neurotoxicity induced by a single oral dose of aniline in rats. *J. Vet. Med. Sci*. **63(5)**, 539-546 (2001).

CAYMAN CHEMICAL
1180 EAST ELLSWORTH RD
ANN ARBOR, MI 48108 · USA
PHONE: [800] 364-9897
[734] 971-3335
FAX: [734] 971-3640
CUSTSERV@CAYMANCHEM.COM
WWW.CAYMANCHEM.COM