**4-Azido-L-homoalanine HCl (L-AHA)**

(S)-2-Amino-4-azidobutanoic acid hydrochloride

<table>
<thead>
<tr>
<th>Cat. No.</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>CLK-AA005-10</td>
<td>10 mg</td>
</tr>
<tr>
<td>CLK-AA005-100</td>
<td>100 mg</td>
</tr>
<tr>
<td>CLK-AA005-500</td>
<td>500 mg</td>
</tr>
</tbody>
</table>

**Structural formula of 4-Azido-L-homoalanine HCl (L-AHA)**

**For research use only!**

**Shipping:** shipped on blue ice

**Storage Conditions:** store at 4 °C

**Additional Storage Conditions:** store dry

**Shelf Life:** 12 months after date of delivery

**Molecular Formula:** C₄H₈N₄O₂ * HCl

**Molecular Weight:** 144.13 g/mol + 36.45 g/mol

**CAS#:** 942518-29-8

**Purity:** > 99 % (TLC, Titration)

**Form:** white powder

**Applications:**
Proteins synthesis monitoring[^123]

**Description:**
4-Azido-L-homoalanine (L-AHA) provides a non-radioactive alternative to analyze the global protein synthesis in cell culture. It is cell-permeable and randomly incorporated instead of methionine during translation[^123]. The resulting azide-labeled full-length proteins can subsequently be detected via Cu(I)-catalyzed or Cu(I)-free click chemistry that offers the choice to introduce a Biotin group (via Azides of Biotin or DBCO-containing Biotin, respectively) for subsequent purification tasks or a fluorescent group (via Azides of fluorescent dyes or DBCO-containing fluorescent dyes, respectively) for subsequent microscopic imaging.

Presolski et al.[^4] and Hong et al.[^5] provide a general protocol for Cu(I)-catalyzed click chemistry reactions that may be used as a starting point for the set up and optimization of individual assays.

**Related Products:**
Copper (II)-Sulphate (CuSO₄), #CLK-MI004
Tris(3-hydroxypropyltriazolylmethyl)amine (THPTA), #CLK-1010
Sodium Ascorbate (Na-Ascorbate), #CLK-MI005

**Selected References:**