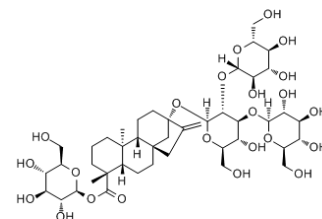


## Data Sheet

Product Name:	Rebaudioside A
Cat. No.:	HY-N0466
CAS No.:	58543-16-1
Molecular Formula:	C <sub>44</sub> H <sub>70</sub> O <sub>23</sub>
Molecular Weight:	967.01
Target:	Others
Pathway:	Others
Solubility:	10 mM in H <sub>2</sub> O



### BIOLOGICAL ACTIVITY:

Rebaudioside A is a steviol glycoside,  $\alpha$ -glucosidase inhibitor with IC<sub>50</sub> of 35.01  $\mu$ g/ml. can inhibit ATP-sensitive K<sup>+</sup>-channels.

Target:  $\alpha$ -glucosidase [1]

IC 50: 35.01  $\mu$ g/mL

In vitro: rebaudioside A stimulates the insulin secretion from MIN6 cells in a dose- and glucose-dependent manner. In conclusion, the insulinotropic effect of rebaudioside A is mediated via inhibition of ATP-sensitive K<sup>+</sup>-channels and requires the presence of high glucose. [2]

In vivo: in vivo mouse micronucleus test at doses up to 750 mg/kg bw and an unscheduled DNA synthesis test in rats at doses up to 2000 mg/kg bw, rebaudioside A do not cause any genotoxic effects at any of the doses tested.[3]

### References:

[1]. Adari BR et al. Synthesis of rebaudioside-A by enzymatic transglycosylation of stevioside present in the leaves of *Stevia rebaudiana* Bertoni. *Food Chem.* 2016 Jun 1;200:154-8.

[2]. Abudula R et al. Rebaudioside A directly stimulates insulin secretion from pancreatic beta cells: a glucose-dependent action via inhibition of ATP-sensitive K<sup>+</sup>-channels. *Diabetes Obes Metab.* 2008 Nov;10(11):1074-85.

[3]. Williams LD et al. Genotoxicity studies on a high-purity rebaudioside A preparation. *Food Chem Toxicol.* 2009 Aug;47(8):1831-6.

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

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