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

Obinutuzumab

Cat. No.:	HY-P9910
CAS No.:	949142-50-1
Molecular Weight:	146298.97
Target:	CD20
Pathway:	Immunology/Inflammation
Storage:	Please store the product under the recommended conditions in the Certificate of Analysis.

BIOLOGICAL ACTIVITY

Description	Obinutuzumab (GA101) a novel glycoengineered Type II CD20 humanized IgG1 monoclonal antibody in development for non-Hodgkin lymphoma.
In Vitro	Obinutuzumab is found to be superior to rituximab and ofatumumab in the induction of direct cell death (independent of mechanical manipulation required for cell aggregate disruption formed by antibody treatment), whereas it is 10 to 1,000 times less potent in mediating CDC. Obinutuzumab shows superior activity to rituximab and ofatumumab in ADCC and whole-blood B-cell depletion assays, and is comparable with these two in ADCP. Obinutuzumab also shows slower internalization rate upon binding to CD20 than rituximab and ofatumumab[1] MCE has not independently confirmed the accuracy of these methods. They are for reference only.
In Vivo	Obinutuzumab is more active than rituximab administered at similar doses on established RL tumors. The antitumor effect of obinutuzumab against RL xenografts is dose dependent in terms of tumor growth inhibition (TGI). TGI is calculated using NCI formula at day 34 and shows values of 25, 75, and 85% for the 10, 30, and 100 mg/kg dosages of obinutuzumab, respectively. The higher doses of 30 and 100 mg/kg of obinutuzumab significantly inhibit the growth of RL tumors and result in some complete tumor remissions (10% and 30%, respectively). Tolerability of obinutuzumab with these regimens is excellent and no significant modification of body weight is observed[2]. Obinutuzumab induces a strong antitumor effect, including complete tumor remission in the SU-DHL4 model and overall superior efficacy compared with both rituximab and ofatumumab[1]. Obinutuzumab plus bendamustine achieves superior tumor growth inhibition versus rituximab plus bendamustine and shows a statistically significant effect versus the respective single treatments. Obinutuzumab plus chemotherapy is superior to the respective monotherapies[3]. MCE has not independently confirmed the accuracy of these methods. They are for reference only.

PROTOCOL

Animal Administration [2]	Mice: For xenograft experiments, 1×10^6 RL cells are injected subcutaneously on day 1. Mice are randomized when a tumor becomes palpable in groups of 10 and treatment is initiated. In a first set of experiments, rituximab and obinutuzumab are used as monotherapy at different dosages twice weekly. The 5 different groups of 10 mice are: control group receiving vehicle (NaCl 0.9%), rituximab (30 mg/kg), obinutuzumab (10 mg/kg), obinutuzumab (30 mg/kg), and obinutuzumab (100 mg/kg). The treatment is administered intravenously twice a week. The mice are closely monitored regarding weight and general status[2]. MCE has not independently confirmed the accuracy of these methods. They are for reference only.

REFERENCES

[1]. Herter S, et al. Preclinical activity of the type II CD20 antibody GA101 (obinutuzumab) compared with rituximab and ofatumumab in vitro and in xenograft models. Mol Cancer Ther. 2013 Oct;12(10):2031-42.

[2]. Dalle S, et al. Preclinical studies on the mechanism of action and the anti-lymphoma activity of the novel anti-CD20 antibody -GA101. Mol Cancer Ther. 2011 Jan;10(1):178-85.

[3]. Herting F, et al. Enhanced anti-tumor activity of the glycoengineered type II CD20 antibody obinutuzumab(GA101) in combination with chemotherapy in xenograft models of human lymphoma. Leuk Lymphoma. 2014 Sep;55(9):2151-5160.

Tel: 609-228-6898 Fax: 609-228-5909 E-mail: tech@MedChemExpress.com

Address: 1 Deer Park Dr, Suite Q, Monmouth Junction, NJ 08852, USA