Technical Data Sheet

InVivoSIM anti-human amyloid-beta (Solanezumab Biosimilar)

Attention: Use of this product constitutes an agreement to Bio X Cell's Terms and Conditions which are included with this product in print and can also be found at https://bioxcell.com/terms-and-conditions.

Lot Specific Information

Lot Number: **Lot Specific***
Volume: **Lot Specific***
Concentration: **Lot Specific* (generally 4 to 11 mg/ml) ***
Total Protein: **Lot Specific***

*This information will be noted on the certificate of analysis that ships with this product.

Product Information

Catalog Number:	**SIM0047**
Clone:	**Solanezumab**
Isotype:	Human IgG1, κ
Recommended Isotype Control(s):	RecombiMAb human IgG1 isotype control, anti-hen egg lysozyme
Recommended Dilution Buffer:	InVivoPure pH 7.0 Dilution Buffer
Immunogen:	Human APP Abeta, soluble monomer
Reported Applications:	*in vivo* functional assays *in vitro* functional assays ELISA Western blot Immunohistochemistry (paraffin)
Formulation:	PBS, pH 7.0 Contains no stabilizers or preservatives
Endotoxin:	≤0.5EU/mg (≤0.0005EU/µg) Determined by LAL gel clotting assay
Purity:	≥95% Determined by SDS-PAGE
Sterility:	0.2 µm filtration
Production:	Purified from cell culture supernatant in an animal-free facility
Aggregation:	<5% Determined by SEC
RRID:	
Molecular Weight:	150 kDa

Murine Pathogen Test Results

Mouse Norovirus: Negative, Mouse Parvovirus: Negative, Mouse Minute Virus: Negative, Mouse Hepatitis Virus: Negative, Reovirus Screen: Negative, Lymphocytic Choriomeningitis virus: Negative, Lactate Dehydrogenase-Elevating Virus: Negative, Mouse Rotavirus: Negative, Theiler's Murine Encephalomyelitis: Negative, Ectromelia/Mousepox Virus: Negative, Hantavirus: Negative, Polyoma Virus: Negative, Mouse Adenovirus: Negative, Sendai Virus: Negative, Mycoplasma Pulmonis: Negative, Pneumonia Virus of Mice: Negative, Mouse Cytomegalovirus: Negative, K Virus: Negative

Description

This non-therapeutic biosimilar antibody uses the same variable regions as the therapeutic antibody, Solanezumab, making it ideal for research use. Solanezumab is a humanized IgG1κ anti-human APP antibody, and it reacts preferentially with soluble monomers rather than fibrillar beta-amyloid or abeta. Solanezumab does not bind Aβ's aggregated forms. Aβ is a peptide that is suggested to play a critical role in the pathogenesis of Alzheimer's disease (AD), and this peptide is generated through the aberrant protein processing of amyloid-β protein precursor (APP or AβPP). APP undergoes its initial cleavage by either α- or β-Secretase (or BACE1). α-Secretase mediated cleavage of APP leads to the formation of sAPPα

and the α-C-terminal fragment (α-CTF or APP-C83). β-Secretase cleaves sAPPβ and the β-C-terminal fragment (β-CTF or APP-C99). γ-Secretase further cleaves C99 and C83 to P3 and Aβ respectively. Aβ's amino acid length can range from 37 to 43, depending on the location of γ-secretase cleavage and the two main Aβ species are Aβ42 and Aβ40. Aβ42 is present in amyloid plaques more frequently than Aβ40, and Aβ drives the basic neuropathological abnormalities in AD that are characterized by the presence of neurofibrillary tangles, i.e., intraneuronal protein clusters, composed of paired helical filaments of the hyperphosphorylated tau protein, a microtubule-associated protein, and extracellular Aβ aggregates (senile plaques). Solanezumab recognizes a conformational epitope in the central region of human Aβ (amino acid residues 16-26), thereby reacting with various N-terminally truncated species of Aβ (e.g., Ab3-42) that are known to exist alongside full-length Aβ (Ab1-42) in AD senile plaques. Preclinical studies involving the in vivo administration of Solanezumab have shown that this antibody promotes Aβ clearance from the brain.

Storage

Store at the stock concentration at 4°C . **Do not freeze.**
It is not uncommon for a floccule or precipitate to appear during storage. The floccule is typically buffer salts precipitating out of solution or a small bit of protein aggregation. For information on how to remove floccules or precipitates see our FAQ's at https://bioxcell.com/faqs.

Protocol Information

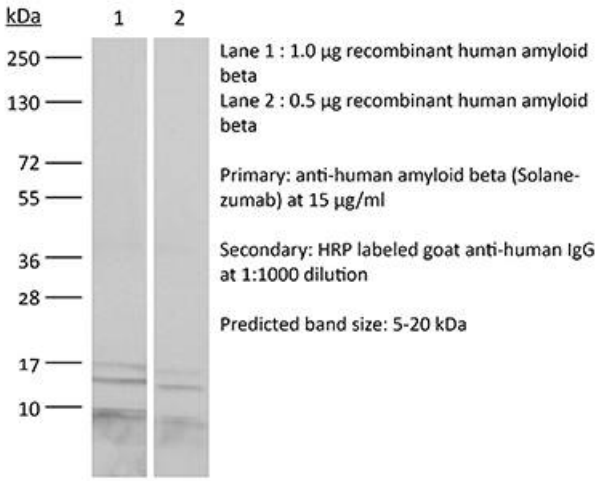
Since applications vary, each investigator should use the application references as a guide to help estimate the appropriate dose or concentration. The dose or concentration can be further optimized experimentally in a dose response or titration experiment.

Application References

For a complete list of references, visit https://bioxcell.com/sim0047?bxcs=9k1b3a#tab_references or scan the QR code below.

Binding Validation

Validation data shown below confirms that this clone binds to its target antigen. For lot specific binding validation data, e-mail technicalservice@bioxcell.com.



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