

PRODUCT INFORMATION



IRBP (651-670) (human) (trifluoroacetate salt)

Item No. 36953

Formal Name:	L-leucyl-L-alanyl-L-glutaminyglycyl-L-alanyl-L-tyrosyl-L-arginyl-L-threonyl-L-alanyl-L-valyl-L- α -aspartyl-L-leucyl-L- α -glutamyl-L-seryl-L-leucyl-L-alanyl-L-seryl-L-glutaminy-L-leucyl-L-threonine, trifluoroacetate salt	H—Leu—Ala—Gln—Gly—Ala—Tyr—Arg—Thr—Ala—Val—
Synonyms:	Interphotoreceptor Retinoid-Binding Protein (651-670), IRBP ₆₅₁₋₆₇₀	Asp—Leu—Glu—Ser—Leu—Ala—Ser—Gln—Leu—Thr—OH
Peptide Sequence:	LAQGAYRTAVDLES LASQLT-OH	• XCF ₃ COOH
MF:	C ₉₁ H ₁₅₁ N ₂₅ O ₃₂ • XCF ₃ COOH	
FW:	2,107.3	
Purity:	≥98%	
Supplied as:	A solid	
Storage:	-20°C	
Stability:	≥4 years	

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

Laboratory Procedures

IRBP (651-670) (IRBP₆₅₁₋₆₇₀) (human) (trifluoroacetate salt) is supplied as a solid. A stock solution may be made by dissolving the IRBP₆₅₁₋₆₇₀ (human) (trifluoroacetate salt) in the solvent of choice, which should be purged with an inert gas. IRBP₆₅₁₋₆₇₀ (human) (trifluoroacetate salt) is soluble in organic solvents such as DMSO and dimethyl formamide. The solubility of IRBP₆₅₁₋₆₇₀ (human) (trifluoroacetate salt) in these solvents is approximately 10 and 1 mg/ml, respectively.

Description

IRBP₆₅₁₋₆₇₀ is a peptide fragment of IRBP, also known as retinoid-binding protein 3, which is involved in pigment regeneration by transporting retinol and retinal from photoreceptor cells to retinal pigment epithelium.^{1,2} IRBP₆₅₁₋₆₇₀ has been used to induce autoimmune uveoretinitis in C57BL/6 mice, which bear the H-2^b haplotype. Immunization with IRBP₆₅₁₋₆₇₀ (300 μ g/animal) increases ocular IL-1 β , IL-6, IL-17, TNF- α , and IFN- γ levels, immune cell infiltration, and photoreceptor damage in mice.

References

- Mattapallil, M.J., Silver, P.B., Cortes, L.M., *et al.* Characterization of a new epitope of IRBP that induces moderate to severe uveoretinitis in mice with H-2^b haplotype. *Invest. Ophthalmol. Vis. Sci.* **56(9)**, 5439-5449 (2015).
- Zeng, S., T., Z., Madigan, M.C., *et al.* Interphotoreceptor retinoid-binding protein (IRBP) in retinal health and disease. *Front. Cell. Neurosci.* **14**, 577935 (2020).

WARNING

THIS PRODUCT IS FOR RESEARCH ONLY - NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

SAFETY DATA

This material should be considered hazardous until further information becomes available. Do not ingest, inhale, get in eyes, on skin, or on clothing. Wash thoroughly after handling. Before use, the user must review the complete Safety Data Sheet, which has been sent via email to your institution.

WARRANTY AND LIMITATION OF REMEDY

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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