

Time: 2024.08.03-2024.08.07

1. **Experiment:** Determinate Binding Sites
2. **Time:** 2024.08.03-2024.08.07
3. **Member:** Xudong Tang, Yang Jin, Binxuan Zhang, Kaiqing Zhang, Xuanton Liu
4. **Method:**  
Through reference research, we identified the native binding sites for IL-2 receptor subunits  $\beta$  and  $\gamma$  as the active sites.
5. **Result:**

**Table.1** Native binding sites for IL-2 receptor subunits  $\beta$  and  $\gamma$  as the active sites

Interleukin-2 subunits	Sequence
Interleukin-2 receptor alpha chain	MDSYLLMWGLLTFIMVPGCQAELEDCDDDPPEIPHATFKAMAYKEGTM LNCECKRGFRRIKSGSLYMLC TGNSSHSSWDNQCQCTSSATRNTTKQVTPQPEEQKERKTTEMQSPMQPVDQASLPGHCREPPPWENE ATERIYHFVVGQMVYYQCQVQGYRALHRGPAESVCKMTHGKTRWTQPQLICTGEMETSQFPGEKPKQ ASPEGRPESETSCLVTTTDFQIQTEMAATMETSIFTTEYQVAVAGCVFLLISVLLSGLTWQRRQRKSRR TI
	MLKPSLPFTSLLFLQLPLLGLVGLNTTILTPNGNEDTTADFFLTTMPTDLSVSTLPLPEVQCFFVFNVEYM NCTWNSSSEPQPTNLTLHYWYKNSDNDKVQKCSHYLFSEEITSGCQLQKKEIHLYQTFVVQLQDPREP RRQATQMLKLQNLVIPWAPENLTLHKLSQSLELNWNNRFLNHCLEHLVQYRTDWDHSWTEQSVQDY RHKFSLPSVDGQKRYTFRVRSRFPNLCGSAQHWSEWSHPIHWGNTSKENPFLFALEAVVISVGMGLI ISLLCVYFWLERTMPRIPTLKNLEDLVTEYHGNFSAWSGVSKGLAESLQPDYSERLCLVSEIPPKGGAL GEGPGASPCNQHSPLYWAPPCYTLKPET
Interleukin-2 receptor gamma chain	MAAPALSWRLPLLILLPLATSWASAAVNGTSQFTCFYNSRANISCVWSQDQALQDTSQVHAWPDRR RWNQTCELLPVSQASWACNLILGAPDSQKLTVDIVTLRVLCREGVRWRVMAIQDFKPFENLRLMAPI SLQVVHVETHRCNISWEISQASHYFERHLEFEARTLSPGHTWEEAPLLTLKQKQEWICLETLPDQTQYE FQVRVKPLQGEFTTWSWSPQLAFRTKPAALGKDTIPWLGHLLVGLSGAFGFIILVYLLINCRNTGPWL KKVLKCNTPDPSKFFSLSSEHGGDVQKWLSSPFPSSSFSPGGLAPEISPLEVLERDKVTQLLLQQDKV PEPASLSSNHSLSCTFTNQGYFFFHLPDALEIEACQVYFTYDPYSEEDPDEGVAGAPTGSSPQLQPLSG EDDAYCTFPSRDDLLLFSPSLLGGPSPSTAPGGSGAGEERMPPSLQERVPRDWDQPPLGPPTPGVPDLV DFQPPPELVREAGEEVPDAGPREGVSFPWSRPPQGGEFRALNARLPLNTDAYLSLQELQGDPTHLV
Interleukin-2 receptor beta chain	