

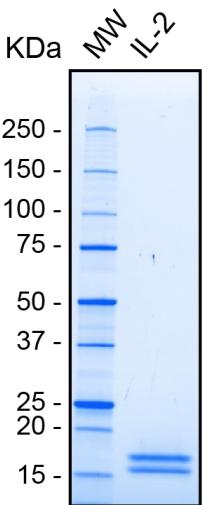
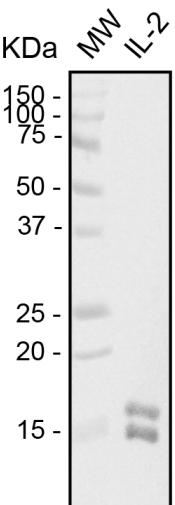
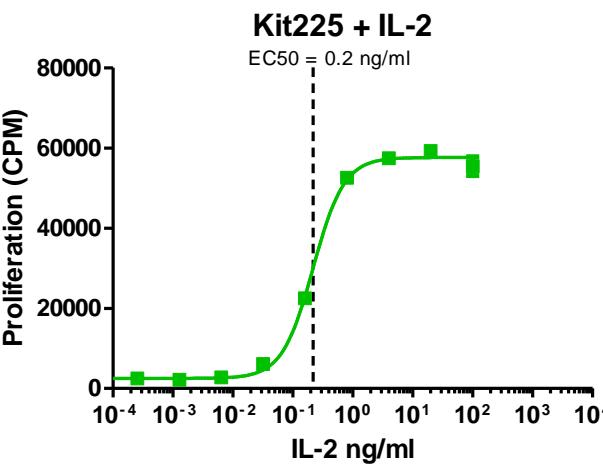
DESCRIPTION

Description	Recombinant Human Interleukine-2 (IL-2), NCBI Accession Number: P60568
Sequence	Ala21-Thr153
Expression system	HEK293 cells
Tag	His Tag C-Terminus
Purification	Affinity chromatography followed by Ion exchange chromatography
Extinction coefficient	10095 M $-1 \cdot \text{cm}^{-1} \text{Abs} 0.1\% (=1 \text{ g/l}) 0.617$ assuming all pairs of Cys residues form cystines
Predicted Molecular Weight	16.4 kDa

SPECIFICATIONS

SDS Page	17 & 18 kDa, second band results of glycosylation (confirmed by mass spectrometry)
Concentration	10µg/ vial (715-H02-010-CF) or 25 µg/ vial (715-H02-025-CF)
Purity	>95% by SDS PAGE gel
Formulation	Lyophilized from PBS pH 7.4 (NaCl 155mM, Na ₂ HPO ₄ 8mM & KH ₂ PO ₄ , 1.8mM, Trehalose)
Reconstitution	Centrifuge the vial prior opening It is recommended to reconstitute in sterile water at 100 µg/ml
Endotoxins	Negative on cell based assay
Activity	Measured in a cell based assay on stimulated Kit225 cells (EC50= 0.2 ng/ml)
Stability and Storage	Store at -20°C. Avoid repeated freeze-thaw cycles Stable one week at 2 to 8°C after reconstitution under sterile conditions Stable 12 months -20°C to -80°C after reconstitution under sterile conditions

DATA

SDS-PAGE under reducing conditions and visualized by Coomassie blue staining showing a band at 17 and 18 kDa (glycosylated form). Western Blot: IL-2 as antigen (with mouse monoclonal Antibody B-G5 # 855.020.005) chemiluminescence detection	Biological Activity measured in a cell proliferation assay using Kit225 cells The EC50 for this effect is 0.2 ng/ml																																		
 <p>KDa MW IL-2</p> <table border="1"> <tr><td>250</td><td></td></tr> <tr><td>150</td><td></td></tr> <tr><td>100</td><td></td></tr> <tr><td>75</td><td></td></tr> <tr><td>50</td><td></td></tr> <tr><td>37</td><td></td></tr> <tr><td>25</td><td></td></tr> <tr><td>20</td><td></td></tr> <tr><td>15</td><td></td></tr> </table>	250		150		100		75		50		37		25		20		15		 <p>KDa MW IL-2</p> <table border="1"> <tr><td>150</td><td></td></tr> <tr><td>100</td><td></td></tr> <tr><td>75</td><td></td></tr> <tr><td>50</td><td></td></tr> <tr><td>37</td><td></td></tr> <tr><td>25</td><td></td></tr> <tr><td>20</td><td></td></tr> <tr><td>15</td><td></td></tr> </table>	150		100		75		50		37		25		20		15	
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 <p>Kit225 + IL-2 EC50 = 0.2 ng/ml</p> <table border="1"> <tr><td>10⁻⁴</td><td>10⁻³</td><td>10⁻²</td><td>10⁻¹</td><td>10⁰</td><td>10¹</td><td>10²</td><td>10³</td><td>10⁴</td> </tr> <tr><td>0</td><td>0</td><td>0</td><td>0</td><td>0</td><td>20000</td><td>40000</td><td>60000</td><td>80000</td></tr> </table>	10 ⁻⁴	10 ⁻³	10 ⁻²	10 ⁻¹	10 ⁰	10 ¹	10 ²	10 ³	10 ⁴	0	0	0	0	0	20000	40000	60000	80000																	
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HUMAN IL-2

IL-2 is a powerful immunoregulatory lymphokine produced by T-Cells in response to antigenic or mitogenic activation (1). IL-2 stimulates growth and differentiation of B-Cells, most T-cells, NK cells, monocytes and macrophages (2,3,4).

Mature IL-2 is a 15.4 kDa globular glycoprotein containing 133 amino acid residues including one intrachain disulfide bond between residues 58 and 105 (5).

Apart from its most important role to mediate antigen-specific T-lymphocyte proliferation (6), IL-2 modulates the expression of interferon- γ (7) and major histocompatibility antigens.

Alterations in the ability of T-cell to synthesize IL-2 have been observed in physiologic and pathologic states. Currently, IL-2 is used to enhance the immune system of patients for the treatment of cancer and infectious disease.

RELATED PRODUCTS

Code	Products	Quantity
715-H02-XXX-BSA	Recombinant Human Interleukin-2 (IL-2)-BSA	10/25 µg
855.020.000	Anti-Human IL-2 Azide Free (Clone B-G5)	200 µg/200 µl
855.020.005	Anti-Human IL-2 Azide Free (Clone B-G5)	500 µg/500 µl
950.010.048	Human IL-2 ELISA Kit (CE marked)	48 tests
950.010.096	Human IL-2 ELISA Kit (CE marked)	96 tests
950.010.192	Human IL-2 ELISA Kit (CE marked)	192 tests
851.500.XXX	Human IL-2 ELISA Set	96 to 20 x 96 tests
856.001.001PC	Human IL-2 ELISpot Kit	96 tests
856.001.002PC	Human IL-2 ELISpot Kit	2 x 96 tests
856.001.005PC	Human IL-2 ELISpot Kit	5 x 96 tests
856.001.XXX	Human IL-2 ELISpot Set	96 to 20 x 96 tests
869.000.010	Human IL-2 ELISpot Pair	10 x 96 tests

BIBLIOGRAPHY

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- 2.Stern, J&Smith, K.A. (1986). Science 233 :203.
- 3.Beadling, C. et al. (1993). Proc.Nat.Acad.Sci.USA 90 :2719.
- 4.Beadling, C.B.&Smith, K.A. (2002). Med.Immunol.1 :2.
- 5.Robb, R. &Smith, K.A. (1981). Mol. Immunol.18 :1087.
- 6.Williams and al. (1991). Hematol.Pathol.5,45.
- 7.Reem and al. (1984). Sciences 255,429.

Products Manufactured and Distributed by:

Diacclone SAS

6 Rue Dr Jean-François-Xavier Girod

BP 1985, 25020 Besançon Cedex

France

Tel +33 (0)3 81 41 38 38 Fax +33 (0)3 81 41 36 36

Email: info@diacclone.com www.diacclone.com