Human IL-15 ELISA-SET

Ref.: <u>hIL-15-EIA-20</u>

MabTag's ELISA for human Interleukin-15 (hIL-15) contains appropriate reagents sufficient for processing of 20 microplates (20 x 96 wells; 100 μ l/well)

For research only. Not for use in diagnostic or therapeutic procedures.

This ELISA System was evaluated with the NIBSC/WHO international reference standard 95/554

Specificity: human Interleukin-15 (hIL-15)

Typical standard curve range: 78 – 5000 pg/ml

Detection limit: 78 pg/ml

Samples: Culture supernatants, serum, plasma and other body fluids.

For serum and plasma a dilution of \geq 1:10 is recommended.

Content	Working dilution	Storage
4 x vial 500 μl liquid anti-hIL-15 Capture-Antibody (red cap)	1:100	-20°C
4 x vial 500 μl liquid anti-hIL-15 Detection-Antibody (yellow cap)	1:100	-20°C
4 x vial 50 ng lyophilized rhIL-15 Standard (white cap)	customer specific	-20°C
4 x vial 50 μl Poly-HRP-Streptavidin (blue or green cap)	1:1000	-20°C

Additional material required: General ELISA Reagent Pack (GenEIA-Pack-5/20) or
96well-Microplate
Coating-Buffer (e.g. PBS)
Blocking-Buffer / Reagent-Diluent (e.g. PBS + 2% BSA + 0.05% Tween20)
Wash-Buffer (e.g. PBS + 0.05% Tween20)
TMB-Substrate
Stop-solution (e.g. 2 M H ₂ SO ₄)



!Spin down all vials before use!

Step	Incubation	Procedure		
Coating Capture-antibody	≥ OVERNIGHT	Dilute capture-antibody 1:100 in COATING-BUFFER		
	at room	(100 μl capture-antibody in 10 ml COATING-BUFFER).		
	temperature	Subsequently transfer 100 μl of this working-solution to each well and incubate.		
Remove capture-antibody completely by inverting the microplate and blotting it vigorously against clean paper towels.				
Blocking	≥ 1 Hour			
	at room	Add 300 μl BLOCKING-BUFFER to each well and incubate.		
	temperature			
Remove BLOCKING-BUFFER completely by inverting the microplate and blotting it vigorously against clean paper towels.				
Standard & Sample		Dilute standard & samples in REAGENT-DILUENT and transfer 100 μl in the respective		
	≥ 2 Hours at room	wells in duplicates. Standard: Make serial dilutions in REAGENT-DILUENT and begin		
		with a high standard and end with blanks. The standard vial of this set contains 50 ng		
	temperature	lyophilized standard. Reconstitute this in exactly 1 ml REAGENT-DILUENT (stock		
	temperature	solution = 50 ng/ml) and choose a sufficient high standard working solution for your		
		assay (e.g. prepare a 1:10 dilution for a standard curve beginning with 5000 pg/ml).		
Wash 5x vigorously with WASHING-BUFFER and remove resting buffer completely by inverting the microplate and blotting it				
vigorously against clean paper towels.				
Detection- antibody	≥ 2 Hours	Dilute detection-antibody 1:100 in REAGENT-DILUENT		
	at room	(100 μl detection-antibody in 10 ml REAGENT-DILUENT).		
	temperature	Subsequently transfer 100 μl of this working-solution to each well and incubate.		
Wash 5x vigorously with WASHING-BUFFER and remove resting buffer completely by inverting the microplate and blotting it				
		vigorously against clean paper towels.		
Poly-HRP- Streptavidin	<u>20-30 Min</u>	Dilute Poly-HRP-Streptavidin 1:1000 in REAGENT-DILUENT		
	at room	(10 μl in 10 ml REAGENT-DILUENT).		
	temperature	Subsequently transfer 100 μl of this working-solution to each well and incubate.		
Wash 5x vigoroเ	<i>isly</i> with WASHING-BU	IFFER and remove resting buffer completely by inverting the microplate and blotting it		
vigorously against clean paper towels.				
Substrate solution	Up to 60 Min*	Optionally warm the solution to room temperature before use.		
	at room	Add 100 µl of the SUBSTRATE-SOLUTION to each well and incubate.		
	temperature	Control the development of the colour reaction continuously and stop at an		
	in the dark	appropriate time point.		
Stop solution		When the enzymatic colour reaction is sufficiently proceeded stop the reaction by		
	_	adding of 50 µl stop solution. Read the microplate at the substrate-depending		
		wavelength. (e.g. 450 nm for TMB substrate)		
		(if wavelength correction is available, set to 540 nm, 570 nm or 630 nm as reference)		

^{*}The speed of enzymatic colour development is influenced by many customer-specific factors. Therefore the incubation time is variable und specific for each test system.

Note:

All incubation steps except <u>Poly-HRP-Streptavidin</u> and <u>TMB substrate</u> could be optionally carried out over-night. Do not use sodium azide-containing solutions, nor add sodium azide to the supplied reagents. Sodium azide inactivates the peroxidase.

Storage:

Specific storage conditions in the table above.

Reconstituted reagents should be stored at -20°C. Please prevent repeated freeze- thaw cycles. Stable for up to 6 months after opening when stored at -20° C. The performance of the unopened reagents is guaranteed until one year after point of delivery.

Precautions for use:

!The stop solution is an <u>acid solution</u>. TMB-Solution A contain $\underline{H_2O_2}$ and <u>tetramethylbenzidine</u> (TMB). All Buffers and liquid antibody solutions contain 0.045% (v/v) <u>Proclin®950</u> as preservative. All these compounds are harmful and cause respiratory, skin and eye irritation. Do not swallow any components of the set/kit (R22). Wear face, eye and hand clothing protection when using this material (S36). Keep out of reach of children (S2). Keep away from food, drink and animal feeding stuff (S13). !These reagents are offered for research purposes only! For *in vitro* use only. MabTag will not be held responsible for patent infringement or other violations that may occur with the use of our products.

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