# <u>Human IL-1β ELISA-SET</u>

## *Ref.: <u>hIL-1β-EIA-20</u>*

MabTag's ELISA for human Interleukin-1β (IL-1β) contains appropriate reagents

sufficient for processing of 20 microplates

(20 x 96 wells; 100 µl/well)

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

**Specificity**: human Interleukin-1β (IL-1β)

Typical standard curve range: 23 – 1500 pg/ml

Detection limit: 18 pg/ml

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

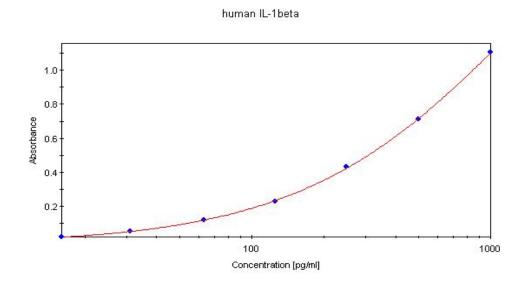
For serum and plasma a dilution of  $\geq$  1:10 is recommended.

Content	Working dilution	Storage
4 x vial 500 μl liquid anti-hIL-1β Capture-Antibody ( <mark>red cap</mark> )	1:100	-20°C
4 x vial 500 μl liquid anti-hIL-1β Detection-Antibody (yellow cap)	1:100	-20°C
4 x vial 50 ng lyophilized rhIL-1β Standard ( <mark>white cap</mark> )	customer specific	-20°C
4 x vial 50 μl Poly-HRP-Streptavidin ( <mark>blue</mark> or <mark>green</mark> 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 $H_2SO_4$ )	

## Typical standard curve



4 Parameter (y = (A - D) / (1 + (x/C)^B) + D) A=2.6346 B=-0.9299 C=1396.3159 D=-0.0210, R-Square = 0.9999



!Spin down all vials before use!

Step	Incubation	Procedure
Casting	≥ OVERNIGHT	Dilute capture-antibody 1:100 in COATING-BUFFER
Coating Capture-antibody	at room	(100 μl capture-antibody in 10 ml COATING-BUFFER).
	temperature	Subsequently transfer 100 $\mu$ l of this working-solution to each well and incubate.
Remove captu	re-antibody complete	ly by inverting the microplate and blotting it <i>vigorously</i> against clean paper towels.
Blocking	≥1 Hour	
	at room	Add 300 µl BLOCKING-BUFFER to each well and incubate.
	temperature	
Remove BLOCK	(ING-BUFFER complet	ely by inverting the microplate and blotting it <i>vigorously</i> against clean paper towels.
Standard &≥ 2 HoursSampleat roomtemperature		Dilute standard & samples in REAGENT-DILUENT and transfer 100 µl in the respective
		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
		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 1:25 dilution for a standard curve beginning with 2000 pg/ml).
Wash 5x <b>vigorou</b>	<b>sly</b> with WASHING-BL	JFFER 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 $\mu$ l of this working-solution to each well and incubate.
Wash 5x <b>vigorou</b>	<b>sly</b> with WASHING-BL	JFFER and remove resting buffer completely by inverting the microplate and blotting it
-		vigorously against clean paper towels.
Date UDD	<u>20-30 Min</u>	Dilute Poly-HRP-Streptavidin 1:1000 in REAGENT-DILUENT
Poly-HRP- Streptavidin	at room	(10 μl in 10 ml REAGENT-DILUENT).
	temperature	Subsequently transfer 100 $\mu$ l of this working-solution to each well and incubate.
Wash 5x <b>vigorou</b>	<b>sly</b> with WASHING-BU	JFFER and remove resting buffer completely by inverting the microplate and blotting it
	Lip to 60 Min*	vigorously against clean paper towels.
Substrate	Up to 60 Min*	Optionally warm the solution to room temperature before use.
Substrate solution	at room	Add 100 $\mu$ I of the SUBSTRATE-SOLUTION to each well and incubate.
	temperature	Control the development of the colour reaction continuously and stop at an
	<u>in the dark</u>	appropriate time point.
Stop solution		When the enzymatic colour reaction is sufficiently proceeded stop the reaction by
	-	adding of 50 $\mu$ l stop solution. Read the microplate at the substrate-depending
		wavelength. (e.g. <b>450</b> 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>TMB substrate</u> could be optionally carried out over-night. Do not use sodium azidecontaining 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  $H_2O_2$  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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