# <u>Human IFNy ELISA-SET</u>

### Ref.: <u>hIFNg-EIA-20</u>

MabTag's ELISA for human Interferon-y (hIFNy) 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.

This ELISA System was evaluated with the NIBSC/WHO international reference standard 87/586

Specificity: human Interferon-γ (hIFNγ)

Typical standard curve range: 31 – 2000 pg/ml

Detection limit: 24 pg/ml

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

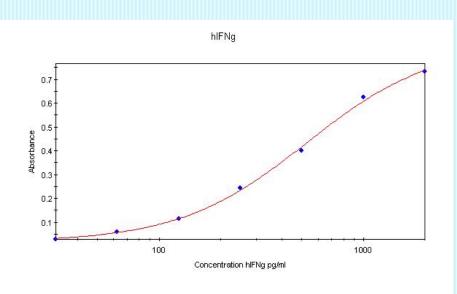
For serum and plasma a dilution of  $\geq$  1:10 is recommended.

Content	Working dilution	Storage
4 x vial lyophilized anti-hIFNγ Capture-Antibody (red cap)	1:100	-20°C
4 x vial lyophilized anti-hIFNγ Detector-Antibody (yellow cap)	1:100	-20°C
4 x vial 50 ng lyophilized rhIFNγ 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 <sub>2</sub> SO <sub>4</sub> )		

## Typical standard curve



4 Parameter (y = (A - D) / (1 + (x/C)^B) + D) A=0.8498 B=-1.3946 C=526.7594 D=0.0160, R-Square = 0.9985



!Spin down all vials before use!

Step	Incubation	Procedure		
Coating Capture-antibody	≥ OVERNIGHT at room temperature	Reconstitute the lyophilized capture-antibody in 500 μl COATING-BUFFER. Dilute <mark>capture-antibody</mark> 1:100 in COATING-BUFFER (100 μl capture-antibody in 10 ml COATING-BUFFER). Subsequently transfer 100 μl of this working-solution to each well and incubate.		
Remove captu	ire-antibody complete	ely by inverting the microplate and blotting it <i>vigorously</i> against clean paper towels.		
Blocking	≥ 1 Hour at room temperature	Add 300 $\mu I$ BLOCKING-BUFFER to each well and incubate.		
Remove BLOCKING-BUFFER completely by inverting the microplate and blotting it <i>vigorously</i> against clean paper towels.				
Standard & Sample	≥ 2 Hours at room temperature	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 <b>50 ng lyophilized</b> <b>standard</b> . Reconstitute this in exactly 1 ml REAGENT-DILUENT (stock solution = 50 ng/ml) and choose a sufficient high standard working solution for your assay (e.g. prepare a 1:100 dilution for a standard curve beginning with 500 pg/ml).		
Wash 5x <b>vigorou</b>	<b>sly</b> with WASHING-BU	JFFER and remove resting buffer completely by inverting the microplate and blotting it		
5		vigorously against clean paper towels.		
Detection- antibody	≥ 2 Hours at room temperature	Reconstitute the lyophilized detection-antibody in 500 μl REAGENT-DILUENT. Dilute detection-antibody 1:100 in REAGENT-DILUENT (100 μl detection-antibody in 10 ml REAGENT-DILUENT). Subsequently transfer 100 μl of this working-solution to each well and incubate.		
Wash 5x <b>vigorou</b>	<b>slv</b> with WASHING-BU	JFFER and remove resting buffer completely by inverting the microplate and blotting it		
<b>y</b>	vigorously with washing borrel and remove resting burler completely by inverting the micropiate and blotting it			
Poly-HRP- Streptavidin	20-30 Min at room temperature	Dilute Poly-HRP-Streptavidin 1:1000 in REAGENT-DILUENT (10 μl in 10 ml REAGENT-DILUENT). Subsequently transfer 100 μl 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		
	vigorously against clean paper towels.			
Substrate solution	Up to 60 Min* at room temperature <u>in the dark</u>	Optionally warm the solution to room temperature before use. Add 100 $\mu$ l of the SUBSTRATE-SOLUTION to each well and incubate. Control the development of the colour reaction continuously and stop at an 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>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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