

## Technical Data Sheet

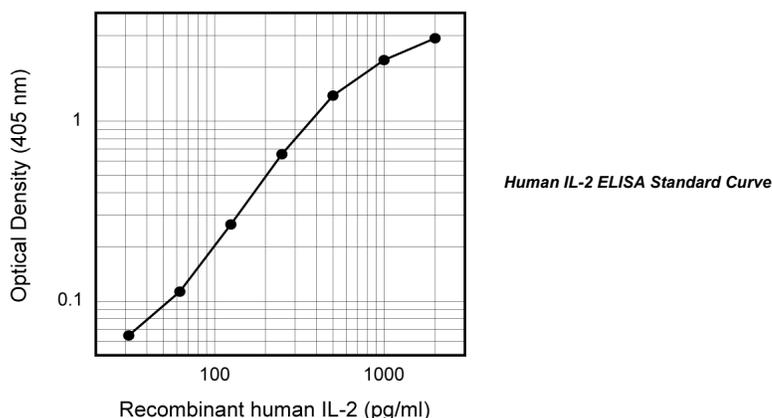
## Purified Mouse Anti-Human IL-2

## Product Information

<b>Material Number:</b>	555051
<b>Alternate Name:</b>	IL2; Interleukin-2; T-cell growth factor; TCGF
<b>Size:</b>	0.5 mg
<b>Concentration:</b>	0.5 mg/ml
<b>Clone:</b>	5344.111
<b>Immunogen:</b>	Human IL-2 protein
<b>Isotype:</b>	Mouse (BALB/c) IgG1, $\kappa$
<b>Reactivity:</b>	QC Testing: Human
<b>Storage Buffer:</b>	Aqueous buffered solution containing $\leq 0.09\%$ sodium azide.

## Description

The 5344.111 antibody specifically binds to the multifunctional cytokine, human interleukin-2 (IL-2). IL-2 is produced by activated T cells and has multiple functions that can affect the growth, proliferation and differentiation of many different target cell types including T cells, B cells, NK cells, monocytes and macrophages. The immunogen used to generate the 5344.111 hybridoma was affinity-purified, recombinant human IL-2 protein.



## Preparation and Storage

Store undiluted at 4°C.

The monoclonal antibody was purified from tissue culture supernatant or ascites by affinity chromatography.

## Application Notes

## Application

ELISA Capture	Routinely Tested
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## Recommended Assay Procedure:

**ELISA Capture:** Purified 5344.111 antibody (Cat. No. 555051) is useful as a capture antibody in sandwich ELISA for measuring human IL-2 protein levels. The purified 5344.111 antibody can be paired with biotinylated B33-2 (Cat. No. 555040) as the detection antibody, with recombinant human IL-2 (Cat. No. 554603) as the standard. The purified 5344.111 antibody should be titrated (0.5-4.0  $\mu\text{g}/\text{mL}$ ) to determine the optimal concentration for ELISA capture. To obtain linear standard curves, doubling dilutions of human IL-2 ranging from  $\sim 2,000$  to 15  $\text{pg}/\text{mL}$  are recommended for inclusion in each ELISA plate.

**Note:** This ELISA pair has been reported to show no cross-reactivity with the following cytokines: mouse IL-1 $\beta$ , IL-2, IL-3, IL-4, IL-5, IL-6, IL-7, IL-9, IL-10, IL-12 p70, IL-15, GM-CSF, IFN- $\gamma$ , MCP-1, TCA-3, TNF; human IL-1 $\alpha$ , IL-1 $\beta$ , IL-3, IL-4, IL-5, IL-6, IL-7, IL-8, IL-9, IL-10, IL-11, IL-12 p70, IL-12 p40, IL-13, IL-15, G-CSF, GM-CSF, IFN- $\gamma$ , lymphotactin, MCP-1, MCP-2, MIP-1 $\alpha$ , MIP-1 $\beta$ , NT-3, PDGF-AA, sCD23, SCF, TNF, LT- $\alpha$ , VEGF; rat IL-2, IL-4, IL-6, IL-10, GM-CSF, IFN- $\gamma$ , TNF.

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**Note:** This ELISA pair is recommended primarily for measuring human IL-2 from experimental cell culture systems. These ELISA reagents are not recommended for assay of serum or plasma samples. For measuring human IL-2 in serum or plasma, the BD OptEIA™ Human IL-2 ELISA Kit II (Cat. No. 550611) or BD OptEIA™ Human IL-2 ELISA Set (Cat. No. 555190) are recommended.

### Suggested Companion Products

Catalog Number	Name	Size	Clone
555040	Biotin Mouse Anti-Human IL-2	0.5 mg	B33-2
554603	Recombinant Human IL-2	10 µg	(none)
550611	Human IL-2 ELISA Kit II	2 plates	(none)
555190	Human IL-2 ELISA Set	20 plates	(none)

### Product Notices

1. Since applications vary, each investigator should titrate the reagent to obtain optimal results.
2. This product is manufactured and sold under license from Pestka Biomedical Laboratories, Inc. (d/b/a PBL InterferonSource) and may be used solely as indicated. This product may not be resold or incorporated in any manner into another product for resale. Any use for therapeutics is strictly prohibited. This product is covered by U.S. Patent No. 5,597,901 and Bulgarian Patent No. BG1895.
3. Sodium azide is a reversible inhibitor of oxidative metabolism; therefore, antibody preparations containing this preservative agent must not be used in cell cultures nor injected into animals. Sodium azide may be removed by washing stained cells or plate-bound antibody or dialyzing soluble antibody in sodium azide-free buffer. Since endotoxin may also affect the results of functional studies, we recommend the NA/LE (No Azide/Low Endotoxin) antibody format, if available, for in vitro and in vivo use.
4. Caution: Sodium azide yields highly toxic hydrazoic acid under acidic conditions. Dilute azide compounds in running water before discarding to avoid accumulation of potentially explosive deposits in plumbing.
5. Please refer to [www.bdbiosciences.com/pharming/protocols](http://www.bdbiosciences.com/pharming/protocols) for technical protocols.

### References

Liao W, Lin JX, Leonard WJ. IL-2 family cytokines: new insights into the complex roles of IL-2 as a broad regulator of T helper cell differentiation. *Curr Protoc Immunol.* 2011; 23(5):598-604. (Biology)

Malek TR. The biology of interleukin-2. *Annu Rev Immunol.* 2008; 26:453-479. (Biology)

Waldmann TA. The biology of interleukin-2 and interleukin-15: implications for cancer therapy and vaccine design. *Nat Rev Immunol.* 2006; 6(8):595-601. (Biology)

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