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 E LISA Grade Type I and Type II Collagen  
 Catalog # 1001 - 1006, 2011 - 2017

**INTRODUCTION**

Polymeric or fibrillar collagen adsorbs immunoglobulins in serum samples, secondary antibodies, and avidin-peroxidase nonspecifically, creating high, false-positive reactions. It also affects the assay sensitivity significantly. To prevent these nonspecific reactions and to obtain consistent assay results, Chondrex provides highly purified, polymeric-free, Arthrogen-CIA® ELISA grade collagen. Various species and types of collagen are available in order to study antibody specificity and cross-reactivity (see Table 1).

Table 1 - Arthrogen-CIA® ELISA grade collagen

Catalog #	Species	Quantity	Abbreviation
<b>Type II Collagen</b>			
2011	Chicken	1 ml, 0.5 mg/ml	ELCII
2012	Bovine	1 ml, 0.5 mg/ml	ELBII
2013	Porcine	1 ml, 0.5 mg/ml	ELPII
2014	Rat	1 ml, 0.5 mg/ml	ELRII
2015	Human	1 ml, 0.5 mg/ml	ELHII
2016	Mouse	1 ml, 0.5 mg/ml	ELMII
2017	Monkey	1 ml, 0.5 mg/ml	ELMKII
<b>Type I Collagen</b>			
1001	Chicken	1 ml, 0.5 mg/ml	ELCI
1002	Bovine	1 ml, 0.5 mg/ml	ELBI
1003	Porcine	1 ml, 0.5 mg/ml	ELPI
1004	Rat	1 ml, 0.5 mg/ml	ELRI
1005	Human	1 ml, 0.5 mg/ml	ELHI
1006	Mouse	1 ml, 0.5 mg/ml	ELMI

Highly purified Arthrogen-CIA® ELISA grade collagen to be used for antibody analysis is supplied as a 100X concentrated solution (0.5 mg/ml). Each vial contains enough collagen to coat 10, 96-well plates. To prevent fibril formation, 10X collagen dilution buffer is also included per order of ELISA grade collagen.

**PROCEDURE FOR COATING ELISA PLATES WITH TYPE I AND TYPE II COLLAGEN**

1. Dilute 1.0 ml of 10X collagen dilution buffer with 9.0 ml cold (refrigerated) glass-distilled water.
2. Add 100 µl of Arthrogen-CIA® ELISA grade type I or type II collagen solution to 10.0 ml of 1X collagen dilution buffer prepared in step 1.
3. Add 100 µl of the diluted collagen solution to each well and incubate at 4°C overnight. Cover the plate to prevent evaporation.

Note: The binding efficiency of collagen on ELISA plates depends upon the type of plastic and pre-treatment of the surface. Therefore, we recommend using a high binding plate such as Dynex Immulon 2HB. Arthrogen-CIA® Mouse Monoclonal Antibody, which cross-react to all type II collagen listed in Table 1, can be used as a positive control or to study the binding efficiency of individual species of type II collagen on ELISA plates.

ELISA R1