

Immunization Grade Salmon Type || Collagen, Lyophilized

Catalog # 20091

For Research Use Only - Not Human or Therapeutic Use

DESCRIPTION: Highly purified type II collagen (treated with 3M guanidine, DEAE-cellulose, and Na2HPO4)

APPLICATION: Can be used for various purposes, such as a standard for collagen analysis by SDS-gel,

substrate for MMP-1, MMP-8, and MMP-13, and as an antigen for immunizing animals.

QUANTITY: 5 mg

FORM: Lyophilized powder

SOURCE: Salmon nasal cartilage

MOLECULAR WEIGHT: 300 kDa

PURITY: >95% by SDS-PAGE, free of pepsin and proteoglycans

STORAGE: 4°C in the dark

STABILITY: 2 years

NOTES: Soluble in acidic buffer (maximum 2 mg/ml), but difficult to dissolve in neutral buffer. In order to

dissolve this product in a neutral buffer, first dissolve collagen in 0.01M or 0.05M acetic acid at 1-2 mg/ml and then add this collagen solution to the desired neutral buffer such as 2-10X Tris-NaCl (NaCl final concentration: 0.15-0.2M) or dialyze against 1X neutral buffer at 4°C.

Chondrex, Inc. offers Cat # $\underline{9075}$, Collagen Solubilizing Buffer (0.05M acetic acid), as a

companion product for dissolving or diluting collagen.

NOTE 1: To avoid fibril formation under neutral conditions, keep solution on ice.

NOTE 2: Denaturation temperature is 32 - 35°C.

NOTE 3: The physicochemical property of type II collagen differs from type I collagen and type II collagen dissolved in a neutral buffer does not form a stable gel incubating at 37°C. In order to prepare a type II collagen gel, additional components such as type I collagen or other

substances may be required.

REFERENCES: Q. Liang, L. Wang, W. Sun, Z. Wang, J. Xu, H. Ma, Isolation and characterization of collagen

from the cartilage of Amur sturgeon (Acipenser schrenckii). Process Biochem. 49, 318-323

(2014).