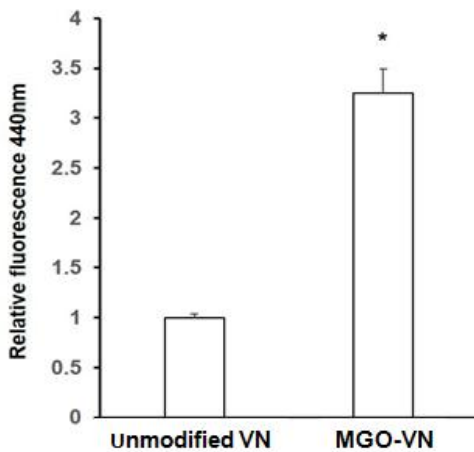


## Supplementary Figures


**Supplementary Figure 1** Characterization of glycation of VN by MGO. **(a)** Identification of glycated VN. VN (10 mg/ml) was incubated with MGO (500  $\mu$ M) in 100 mM sodium phosphate buffer, pH 7.4, at 37 °C for 72 h. Control VN was subjected to the same conditions except that MGO was omitted. The fluorescence intensity was measured at 370/440 nm in the fractions. Results represent the mean  $\pm$  SEM for triplicate determinations. \* $P$ <0.05 vs. unmodified VN. **(b)** Amino acid sequences of human VN (478 AA). Glycosylation sites were identified in this study. The three N-glycosylation sites were colored in blue (rectangle). A O-glycan attachment site was colored in yellow (T55, hexagon). Covered peptides were shaded in red.

**a.**



b.

M A P L R P L L I L A L L A W V A L A D Q E S C K G R C T E  
G F N V D K K C Q C D E L C S Y Y Q S C C T D Y T A E C K P  
Q V T R G D V F T M P E D E Y T V Y D D G E E K N N A T V H  
E Q V G G P S L T S D L Q A Q S K G N P E Q T P V L K P E E  
E A P A P E V G A S K P E G I D S R P E T L H P G R P Q P P  
A E E E L C S G K P F D A F T D L K N G S L F A F R G Q Y C  
Y E L D E K A V R P G Y P K L I R D V W G I E G P I D A A F  
T R I N C Q G K T Y L F K G S Q Y W R F E D G V L D P D Y P  
R N I S D G F D G I P D N V D A A L A L P A H S Y S G R E R  
V Y F F K G K Q Y W E Y Q F Q H Q P S Q E E C E G S S L S A  
V F E H F A M M Q R D S W E D I F E L L F W G R T S A G T R  
Q P Q F I S R D W H G V P G Q V D A A M A G R I Y I S G M A  
P R P S L A K K Q R F R H R N R K G Y R S Q R G H S R G R N  
Q N S R R P S R A T W L S L F S S E E S N L G A N N Y D D Y  
R M D W L V P A T C E P I Q S V F F F S G D K Y Y R V N L R  
T R R V D T V D P P Y P R S I A Q Y W L G C P A P G H L  
1 5 10 15 20 25 30

 Covered by trypsin peptide