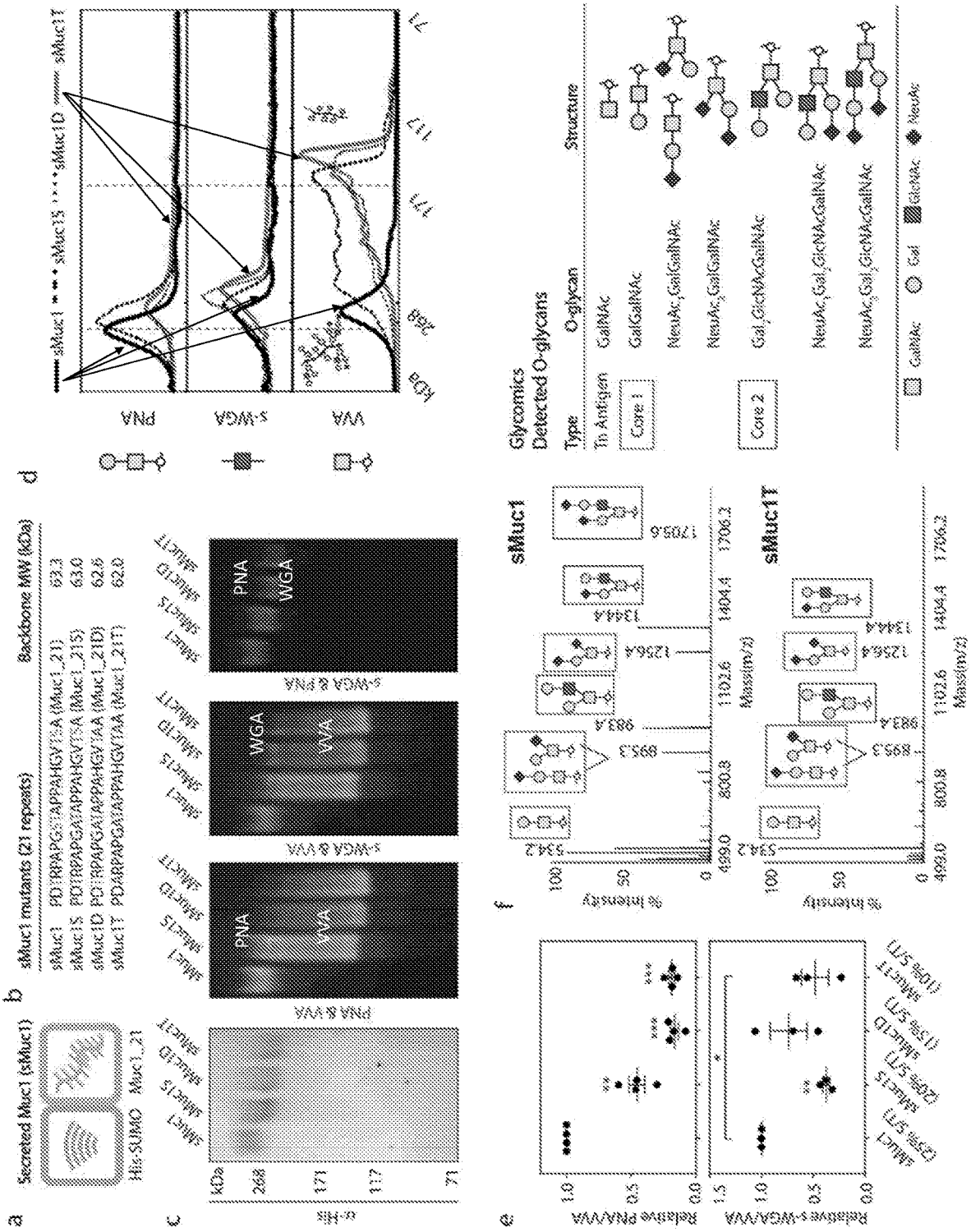
a
Secreted Muc1 (sMuc1)
His-SUMO
Muc1_21
b
sMuc1 mutants (21 repeats)
Backbone MW (kDa)
sMuc1 PDTRPAPGSTAPPAHGVTSA (Muc1_21) 63.3
sMuc1S PDTRPAPGATAPPAHGVTSA (Muc1_21S) 63.0
sMuc1D PDTRPAPGATAPPAHGVTAA (Muc1_21D) 62.6
sMuc1T PDARPAPGATAPPAHGVTAA (Muc1_21T) 62.0
c
α-His
kDa
268
171
117
71
PNA & VVA
s-WGA & VVA
s-WGA & PNA
PNA
VVA
WGA
d
PNA
s-WGA
VVA
sMuc1
sMuc1S
sMuc1D
sMuc1T
e
Relative PNA/VVA
Relative s-WGA/VVA
f
% Intensity
Mass(m/z)
sMuc1
sMuc1T
Glycomics
Detected O-glycans
Type
O-glycan
Structure
Tn Antigen
Core 1
Core 2
GalNAc
GalGalNAc
NeuAc1GalGalNAc
NeuAc2GalGalNAc
Gal1GlcNAcGalNAc
NeuAc1Gal1GlcNAcGalNAc
NeuAc2Gal1GlcNAcGalNAc
GalNAc
Gal
GlcNAc
NeuAc

Figure 3