**Figure 1–Source Data 1.** Raw western blot images for Figure 1B and Figure 1E.

**A picture containing graphical user interface

Description automatically generated**

A picture containing text

Description automatically generated TU8988T B9, MiaPaCa2 M12, HPAC H7: GFAT1

TU8988T B9, MiaPaCa2 M12, HPAC H7: VINCULIN (VNC)

A picture containing text

Description automatically generated

TU8988T tumors: GFAT1

**A picture containing text

Description automatically generated**

TU8988T tumors: VNC

**Figure 3–Source Data 1.** Raw western blot images for Figure 3C-E.

**O-GlcNAc**

**A picture containing text, white

Description automatically generated**

WT TU8988T

A picture containing text, white

Description automatically generatedA picture containing text, white, white goods, appliance

Description automatically generated

TU8988T B9 TU8988T D10

**VNC**

A picture containing text

Description automatically generated

WT TU8988T

TU8988T B9

TU8988T D10

**Figure 5–Source Data 1.** Raw western blot images for Figure 5.

A picture containing background pattern

Description automatically generated

**NAGK**

Lane ID for “Figure 5A”

1. WT TU8988T
2. TU8988T NAGK KO sg1
3. TU8988T NAGK KO sg2
4. WT MiaPaCa2
5. MiaPaCa2 NAGK KO sg1
6. MiaPaCa2 NAGK KO sg2

1 2 3 4 5 6

A close-up of some writing

Description automatically generated with low confidence

1 2 3 4 5 6

**GFAT1**

A picture containing text

Description automatically generated

**ACTIN**

1 2 3 4 5 6

****

1 2 3

1 2 3

1 2 3

**NAGK GFAT1 ACTIN**

Lane ID for “Figure 5A continued”

1. WT HPAC
2. HPAC NAGK KO sg1
3. HPAC NAGK KO sg2

**A picture containing text

Description automatically generatedA picture containing text

Description automatically generated**

Lane 1: TU8988T

Lane 2: GFAT1

Lane 3: ACTIN

**GFAT1 NAGK**

**A picture containing white, device, gauge

Description automatically generated**

**ACTIN**

**A picture containing text

Description automatically generated**

98

198

**Vinculin**

**A picture containing text, wall

Description automatically generated**

62

49

38

28

**NAGK**

**A picture containing wall, indoor, appliance, white

Description automatically generated**

62

49

38

98

198

28

**Vinculin**

**GFAT1**

A picture containing text, envelope, businesscard

Description automatically generated

A picture containing calendar

Description automatically generated  
 **O-GlcNAc Vinculin**

**A piece of paper with writing on it

Description automatically generated with medium confidence**

**NAGK**

**GFAT1 (probed first)**

**Figure 1–Source Data 2.** Raw western blot images for Figure 1–Figure Supplement 1D,E.

**Text, letter

Description automatically generated**

**Diagram, letter

Description automatically generated with medium confidence**

****

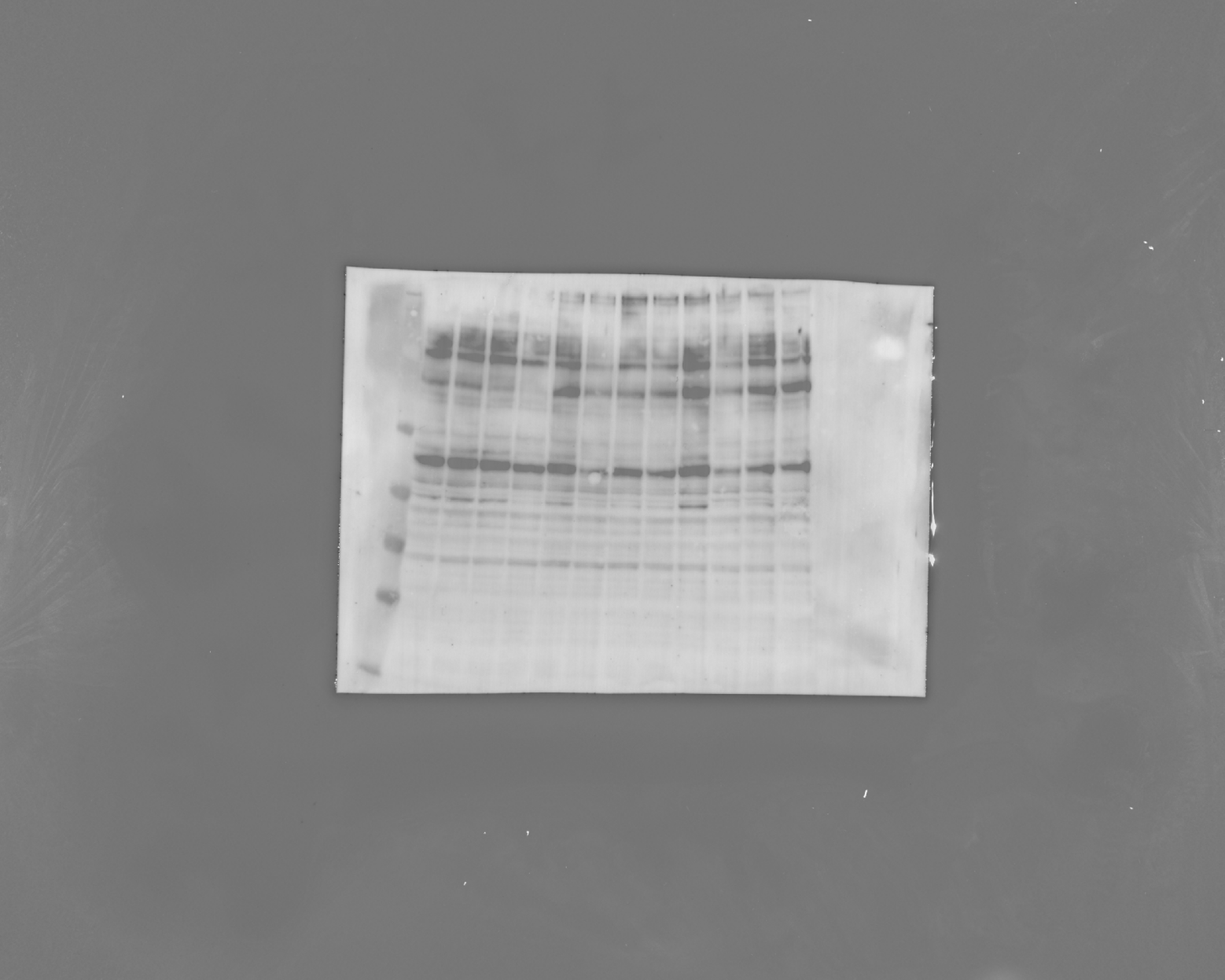
GFAT1 short

GFAT1 long

****

Actin

**Figure 5–Source Data 2.** Raw western blot images for Figure 5–Figure Supplement 1N.



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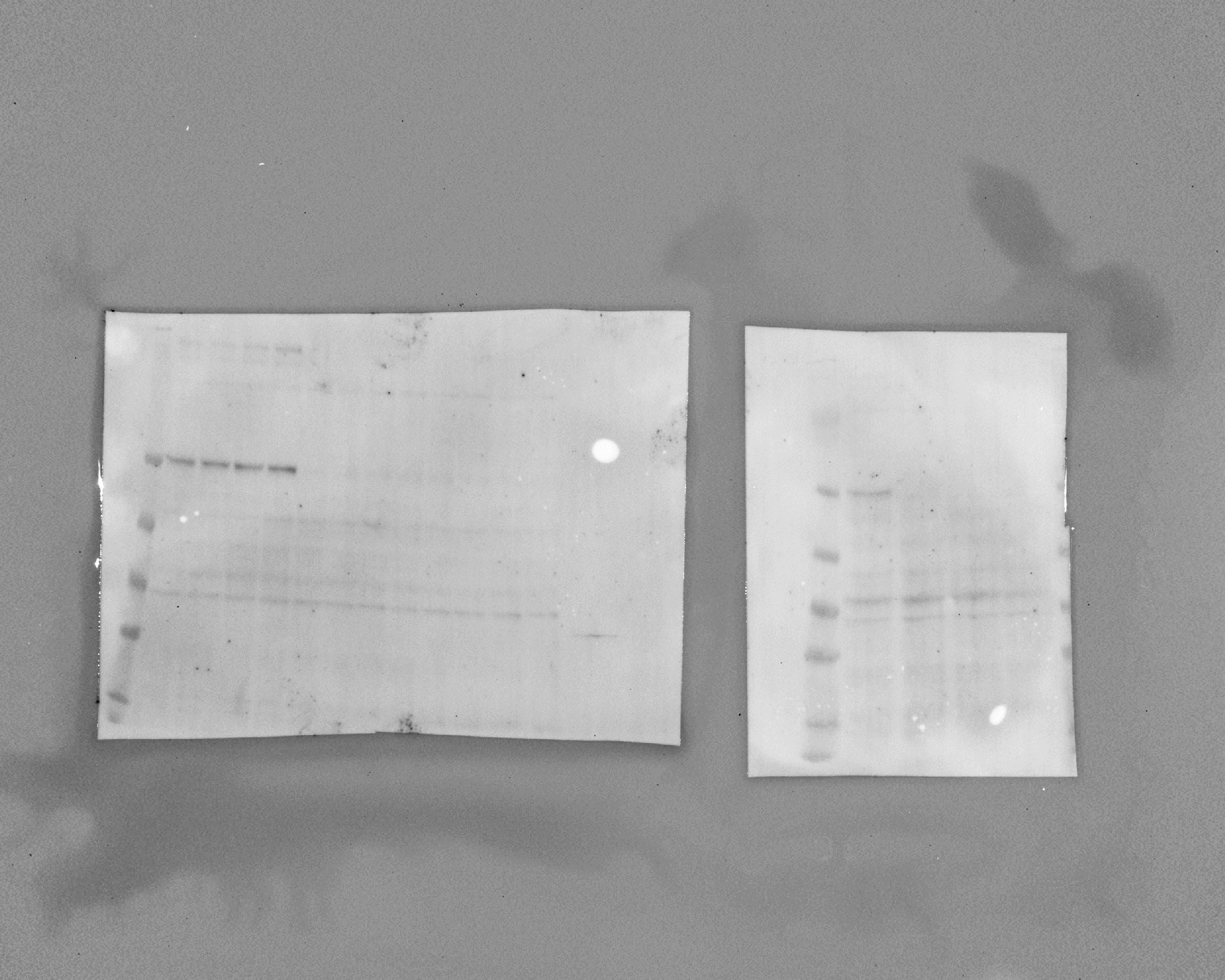
97

64

51

39

28



191

97

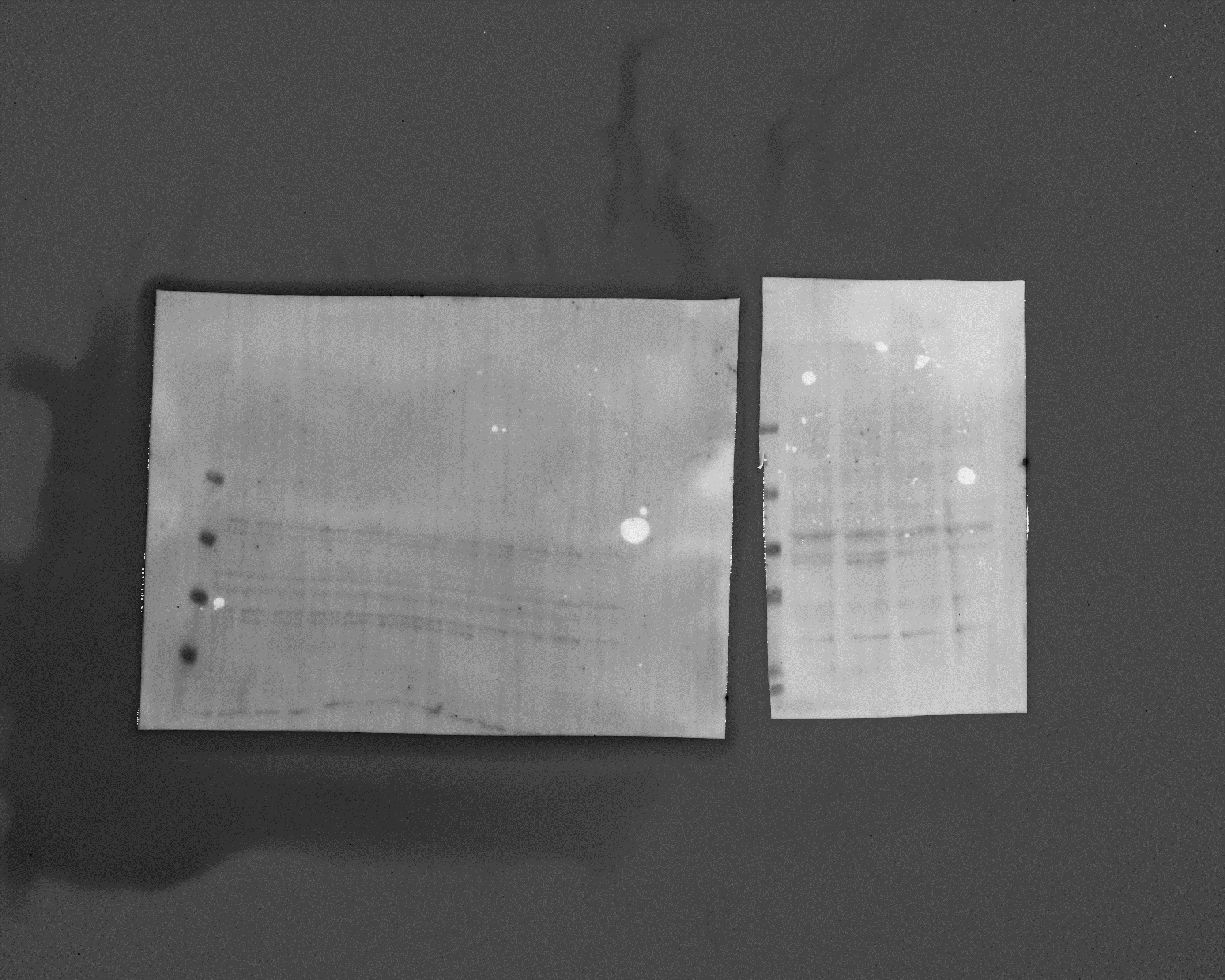
64

51

39

28

**O-GlcNAc GFAT1**



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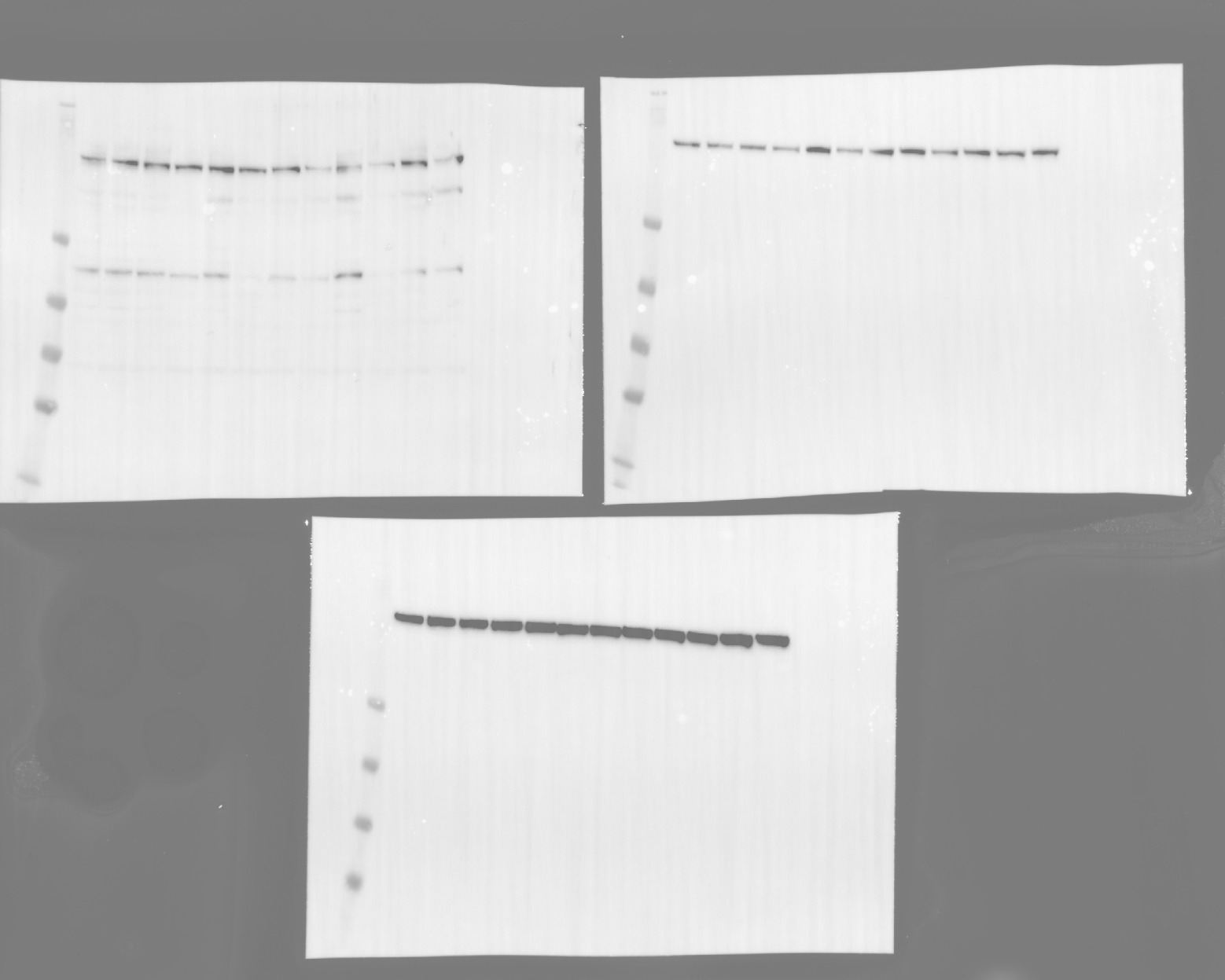
97

64

51

39

28



191

97

64

51

39

28

**NAGK VINCULIN**