

## SUPPLEMENTARY MATERIAL

The systematic names of the compounds studied **1-50**.

**1:** 2-(Tetra-O-acetyl- $\beta$ -D-glucopyranosyl-1-oxy)-5-hydroxy-1,4-naphthoquinone; **2:** 3-(tetra-O-acetyl- $\beta$ -D-glucopyranosyl-1-oxy)-5-hydroxy-1,4-naphthoquinone; **3:** 2,3-bis-(tetra-O-acetyl- $\beta$ -D-glucopyranosyl-1-oxy)-5-hydroxy-1,4-naphthoquinone; **4:** 2-(hepta-O-acetyl- $\beta$ -D-maltosyl-1-oxy)-5-hydroxy-1,4-naphthoquinone; **5:** 3-(hepta-O-acetyl- $\beta$ -D-maltosyl-1-oxy)-5-hydroxy-1,4-naphthoquinone; **6:** 2-(tetra-O-acetyl- $\beta$ -D-glucopyranosyl-1-thio)-5-hydroxy-1,4-naphthoquinone; **7:** 3-(tetra-O-acetyl- $\beta$ -D-glucopyranosyl-1-thio)-5-hydroxy-1,4-naphthoquinone; **8:** 2,3-bis-(tetra-O-acetyl- $\beta$ -D-glucopyranosyl-1-thio)-5-hydroxy-1,4-naphthoquinone; **9:** 2-(tetra-O-acetyl- $\beta$ -D-glucopyranosyl-1-thio)-3-methyl-5-hydroxy-1,4-naphthoquinone; **10:** 3-(tetra-O-acetyl- $\beta$ -D-galactopyranosyl-1-thio)-5-hydroxy-1,4-naphthoquinone; **11:** 3-(tri-O-acetyl- $\beta$ -D-xylopyranosyl-1-thio)-5-hydroxy-1,4-naphthoquinone; **12:** 3-(tri-O-acetyl- $\alpha$ -L-arabinopyranosyl-1-thio)-5-hydroxy-1,4-naphthoquinone; **13:** 3-(hepta-O-acetyl- $\beta$ -D-maltosyl-1-thio)-5-hydroxy-1,4-naphthoquinone; **14:** 3-(tetra-O-acetyl- $\beta$ -D-mannopyranosyl-1-thio)-5-hydroxy-1,4-naphthoquinone; **15:** 2-( $\beta$ -D-glucopyranosyl-1-thio)-3-methyl-5-hydroxy-1,4-naphthoquinone; **16:** 2-( $\beta$ -D-glucopyranosyl-1-thio)-3-propyl-5-hydroxy-1,4-naphthoquinone; **17:** 2,3-bis-(tetra-O-acetyl- $\beta$ -D-glucopyranosyl-1-thio)-5,8-diacetoxyl-1,4-naphthoquinone; **18:** 2,3-bis-(tetra-O-acetyl- $\beta$ -D-glucopyranosyl-1-thio)-1,4-naphthoquinone; **19:** 2,3-bis-(tri-O-acetyl- $\beta$ -D-xylopyranosyl-1-thio)-1,4-naphthoquinone; **20:** 2-(tetra-O-acetyl- $\beta$ -D-glucopyranosyl-1-oxy)-1,4-naphthoquinone; **21:** 2-(tetra-O-acetyl- $\beta$ -D-galactopyranosyl-1-oxy)-1,4-naphthoquinone; **22:** 2-(tetra-O-acetyl- $\alpha$ -D-galactopyranosyl-1-oxy)-1,4-naphthoquinone; **23:** 2-(tri-O-acetyl- $\alpha$ -L-arabinopyranosyl-1-oxy)-1,4-naphthoquinone; **24:** 2-(tri-O-acetyl- $\beta$ -L-arabinopyranosyl-1-oxy)-1,4-naphthoquinone; **25:** 2-(hepta-O-acetyl- $\beta$ -D-lactosyl-1-oxy)-1,4-naphthoquinone; **26:** 2-(hepta-O-acetyl- $\beta$ -D-maltosyl-1-oxy)-3-methyl-1,4-naphthoquinone; **27:** 2-(tetra-O-acetyl- $\beta$ -D-glucopyranosyl-1-oxy)-3-methyl-1,4-naphthoquinone; **28:** 2-(tetra-O-acetyl- $\beta$ -D-glucopyranosyl-1-oxy)-3-ethyl-1,4-naphthoquinone; **29:** 2-(tetra-O-acetyl- $\beta$ -D-glucopyranosyl-1-oxy)-3-hydroxy-1,4-naphthoquinone; **30:** 2-(tetra-O-acetyl- $\beta$ -D-glucopyranosyl-1-oxy)-3-methoxy-1,4-naphthoquinone; **31:** 2-( $\beta$ -D-glucopyranosyl-1-oxy)-3-hydroxy-1,4-naphthoquinone; **32:** 2-(tetra-O-acetyl- $\beta$ -D-glucopyranosyl-1-thio)-1,4-naphthoquinone; **33:** 2-(tetra-O-acetyl- $\beta$ -D-glucopyranosyl-1-thio)-3-chloro-1,4-naphthoquinone; **34:** 2-(tetra-O-acetyl- $\beta$ -D-glucopyranosyl-1-thio)-3-acetoxy-1,4-naphthoquinone; **35:** 2-(tetra-O-acetyl- $\beta$ -D-glucopyranosyl-1-thio)-3-hydroxy-1,4-naphthoquinone; **36:** 2-(tetra-O-acetyl- $\beta$ -D-glucopyranosyl-1-thio)-3-amino-1,4-naphthoquinone; **37:** 2-(tetra-O-acetyl- $\beta$ -D-glucopyranosyl-1-thio)-3-methoxy-1,4-naphthoquinone; **38:** 2-(tri-O-acetyl- $\beta$ -D-xylopyranosyl-1-thio)-3-methoxy-1,4-naphthoquinone; **40:** 2-(tri-O-acetyl- $\alpha$ -L-arabinopyranosyl-1-thio)-3-methoxy-1,4-naphthoquinone; **41:** (3R,4S,4aS,12aS)-3,4-dihydroxy-12-thia-1,5-dioxo-2H,3H,4H,4aH,12aH-naphthacene-6,11-dione; **42:** (2R,3S,4S,4aR,12aS)-2-hydroxymethyl-3,4-dihydroxy-12-thia-1,5-dioxo-2H,3H,4H,4aH,12aH-naphthacene-6,11-dione; **43:** (3S,4S,4aS,12aS)-3,4-dihydroxy-12-thia-1,5-dioxo-2H,3H,4H,4aH,12aH-naphthacene-6,11-dione; **44:** (3R,4S,4aS,12aS)-3,4-diacetoxy-12-thia-1,5-dioxo-2H,3H,4H,4aH,12aH-naphthacene-6,11-dione; **45:** (2R,3R,4S,4aR,12aS)-2-acetoxymethyl-3,4-diacetoxy-12-thia-1,5-dioxo-2H,3H,4H,4aH,12aH-naphthacene-6,11-dione; **46:** (2R,3R,4R,4aR,12aS)-2-acetoxymethyl-3,4-diacetoxy-12-thia-1,5-dioxo-2H,3H,4H,4aH,12aH-naphthacene-6,11-dione; **47:** (2R,3R,4S,4aR,12aS)-2-hydroxymethyl-3,4-dihydroxy-12-thia-1,5-dioxo-2H,3H,4H,4aH,12aH-naphthacene-6,11-dione; **48:** (2R,3R,4S,4aS,12aS)-2-hydroxymethyl-3,4-dihydroxy-12-thia-1,5-dioxo-2H,3H,4H,4aH,12aH-naphthacene-6,11-dione; **49:** (2R,3R,4S,4aS,12aS)-2-acetoxymethyl-3,4-diacetoxy-12-thia-1,5-dioxo-2H,3H,4H,4aH,12aH-naphthacene-6,11-dione; **50:** (2R,3R,4S,4aR,12aS)-2-acetoxymethyl-3-acetoxy-4-(2',3',4',6'-tetra-O-acetyl- $\alpha$ -D-glucopyranosyl-1'-oxy)-12-thia-1,5-dioxo-2H,3H,4H,4aH,12aH-naphthacene-6,11-dione.