Supplementary material

1. Faya Dune (FDU) 25.118717° N 55.8477° E (top of section 168 m asl)

In March 2016, a viewing platform was constructed at the Jebel Faya NE1 archaeological site. Sand was quarried from the dune immediately to the south of the platform which flanks the lower slope of the jebel (Supplementary Figure 1). A 4.4 m deep section was excavated reaching the bedrock contact (Supplementary Table 1). The excavated section shows aeolian bedding structures, with two hard, whitish/grevish, fine grained layers with structures with evidence for of mud curls at the top of each layer. In total, 66 sediment samples were collected at 10 cm intervals in the upper 2 m of the sequence because the bedding was less well defined and was more homogenous in nature, and every 5 cm in the lower 2.4 m due to more clearly defined bedding. 7 OSL samples were collected. 4 OSL samples were taken from above and 3 below the upper hard layer. This included one in the middle of the lower section at 300 cm below surface, one at the upper part of the section at 220 cm below the surface and one sample in the upper part of the section at about 80 cm below surface. Only OSL samples FDU 2, 3 and 4 were dated. The two whitish fine-grained carbonate rich layers indicate standing water, with primary generation, desiccation polygon structures with mud cracks and curls. The lower one is 8 to 10 cm thick. Above these standing water layers the sands are cross-bedded aeolian sands, overlain by planar bedded sands. The upper unit comprises homogenous sands with few visible bedding structures most likely as the result of the upper part of the sequence being reworked by wind.





Supplementary Figure 1. Location of Faya Dune next to the archaeological site Jebel Faya NE1 (upper image). Section through the Faya dune (lower left) and profile (right) showing sediment and OSL samples. Close up of lower section with two layers showing evidence for standing water with mud curls due to desiccation.

| Unit Number Depth (m) | Description | OSL depth below surface (m) | Total height OSL sample (m asl) |
|--------------------------|--|--|--|
| Unit 1 4.40 to 4.18 m | Homogenous reddish aeolian sand. Section reached bedrock. | FDU7 at 4.20 m (not dated) | Top of section 168 m |
| Unit 2 4.18 to 4.08 m | Carbonated silt and fine sand, which formed desiccation cracks. The unit is 8-10 cm thick and clearly distinguishable by its white colour. | | |
| Unit 3 3.65 to 4.08 m | Homogenous sand with one very thin carbonated silt and fine sand layer (ca. 0.5 cm) in-between. | FDU6 at 4.00 m (not dated) FDU5 at 3.70 m (not dated) | |
| Unit 4 3.60 to 3.65 m | Carbonated silt and fine sand, which formed desiccation cracks. The unit is ca. 5 cm thick and clearly distinguishable by its white colour. | | |
| Unit 5 2.90 to 3.60 m | Fine planar bedded aeolian sand. | FDU4 at 3.55 m (dated) FDU3 at 3.00 m (dated) | FDU 4 at 164.45 m FDU 3 at 165.00 m |
| Unit 6 2.50 to 2.90 m | Fine cross bedded aeolian sand. | | |
| Unit 7 2.00 to 2.50 m | Fine cross bedded aeolian sand with erosional contact to underlying unit. The erosional contact is visible in the sharp change of direction of the cross bedding. | FDU2 at 2.20 m (dated) | FDU 2 at 165.80 m |
| Unit 8 0 to 2.00 m | Homogenous sand with minor planar bedding in the lower part only. The upper part of the unit is reworked aeolian sand. | FDU1 at 0.80 m (not dated) | |

Supplementary Table 1. Sediment description and location of OSL samples of FDU.

2. Khadra Quarry (KAD) 25.130653° N 56.004447° E (top of section 217 m asl)

A quarry, 2.5 km south of the E84 highway, was located adjacent to a pipeline service track. This exposed up to 11 m of fan gravels resting directly on the bedrock. The site is located at the distal end of Wadi Shawkah close to the apex of the alluvial plain fan, where is separates into a series of distributary channels. The drainage basin area of Wadi Shawkah is 54 km² with a maximum relief of 1311 m asl (AI Farraj and Harvey 2004). The catchment geology comprises ophiolites dominated by Harzburgite, Dunite mantle rocks, with lower crustal Gabbro's located in the upper part of the catchment. The basal sediments sit directly on the Serpentinite bedrock contact. The basal sediment (Supplementary Table 2, Unit 1) comprise coarse, very poorly sorted, clast supported (50%) sediments with a distinct imbricated (pointing to W) unit of cobbles and boulders up to 30-55 cm in size. The matrix (50%) comprises gravels and small cobbles. OSL KAD1 was sampled at 10 m below the surface. Unit 2 represents channel fill gravel and cobble deposits, which fine upwards. Unit 3 is

represented by alternating layers of planar-bedded fine beds of ophiolite gravels and sands cemented with hydromagnesite or silcrete. OSL KAD3 was sampled at 6.5 m below the surface. Units 4 and 5 were not dated and comprise a change to coarser fluvial clast supported cobbles and gravels with some imbrication evident. Unit 5 is represented by alternating, planar bedded coarse to fine gravels comprising three distinct fining up packets of fluvial sediments. Unit 6 represents the upper 3 m of the sequence and comprises coarse gained cobbles supported by a gravel matrix at base of unit, followed by fine–medium gravels with a series of fining up packets of planar-bedded gravels. KAD7 was sampled at 0.5 m below the surface.





Supplementary Figure 2. Section through 11 m alluvial fan sediments, showing the profile and location of OSL samples Khadra Quarry, Wadi Shawkah, UAE. The sequence at KAD is described from the base upwards, comprises a series of fining up sequences (Supplementary Table 2).

Supplementary Table 2. Sediment description and location of Khadra (KAD) OSL samples.

| Unit Number Depth (m) | Description | OSL sample depths (m) | OSL depth below surface | Total height OSL sample (m asl) |
|-----------------------------|---|--|-------------------------------|---|
| Unit 1 0 to 2.5 m | Bedrock comprising Serpentinite. Coarse, very poorly sorted, clast supported (50%), imbricated (pointing to W) unit comprising cobbles and boulders of mostly Serpentinite up to 30-55 cm in size with a matrix (50%) comprising gravels and small cobbles. | OSL 1 at 1.0 m from bedrock base of sequence (dated) | KAD1 10.0 m | KAD1 207.0 m |
| Unit 2 2.5 to 4.0 m | Channel fill gravels comprising small cobbles to medium gravels fining upwards. Distinct gravel layer at 3.10 to 3.30 m overlain by cobbles (up to 20 cm) and gravels to top of unit. Unit thins to the east. | OSL 2 at 2.5 m (not dated) | | |
| Unit 3 4.0 to 5.0 m | Planar bedding with alternating fine beds of ophiolite fine gravels and sands cemented with hydromagnesite or silcrete. | | KAD3 6.5 m | KAD3 210.5 m |
| Unit 4 5.0 to 6.1 m | Clast supported cobbles and gravels. Some imbricated cobbles up to 20 cm in size from 5.00 to 5.60m. Planar- bedded gravel layer (fine to coarse) at 5.60 to 5.80m, followed by clast supported Harzburgite/Serpentinite, Gabbro and Granite cobbles (up to 25 cm) with gravel matrix. | OSL 4 at 5.8 m (not dated) | | |
| Unit 5 6.1 to 8.0 m | Alternating, planar bedded coarse to fine gravels comprising three distinct fining up packets of sediment between 6.1and 7.0 m Between 7.0 and 8.0 m the unit comprises alternating beds of dark, coarse gravel bands with paler, fine gravels and sands. | OSL 5 at 7.1m (not dated) | | |
| Unit 6 8.0 to 11.0 m | Cobbles supported by gravel matrix at base of unit (8.0 – 8.2 m) followed by fine–medium gravels (8.2-8.4 m) followed by a series of fining up packets of planar-bedded gravels. | OSL 6 at 9.0m (not dated) OSL 7 at 10.5 m (dated) | KAD7 0.5 m | KAD7 216.5 m |

3. Aqabah Pylon (AQP) 25.042817° N 55.802767° E (top of section 156.1 m asl)

AQP (previously named AQA), is located at the junction of Wadi Iddayyah and Wadi Baraq and comprises 4.80 m of fluvial gravels, sands and silts (Supplementary Figure 3, Supplementary Table 3). In the second unit carbonated roots and desiccation cracks can be found. Previous work in the area has dated fluvio-lacustrine terraces up to 10 m thick to between ~61 – 58 ka, (Parton et al., 2013) although the stability and duration of these flooding episodes remains uncertain.



Aqabah Pylon (AQP)



Supplementary Figure 3. Top: photograph of section Aqabah Pylon showing alternating bands of fluvial silts and planar bedded fluvially rework aeolian sands. Carbonated roots casts (left) and desiccation cracks in fine grained silts. Below: section through the AQP profile showing the location of OSL samples.

| Unit Number Depth (m) | Description | OSL depth below surface (m) | Total height OSL sample (m asl) |
|--------------------------|---|--|--|
| Unit 1 4.30 to 4.70 m | Homogenous reddish aeolian sand. Section is unbottomed. | AQP5 at 4.80 m | AQP5 at 150.1 m |
| Unit 2 1.35 to 4.30 m | Alternating bands of fluvial silts and planar bedded fluvially reworked aeolian sand. Carbonate roots and desiccation cracks can be found. Evidence for sporadic precipitated gypsum noted. Some bioturbation is visible. | AQP4 at 4.07 m AQP3 at 4.73 m AQP2 at 3.45 m AQP1 at 1.88 m | AQP4 at 150.8 m AQP3 at 151.1 m AQP2 at 151.4 m AQP1 at 153.0 m |
| Unit 3 0 to 1.35 m | Limestone gravel in sand matrix, in the lower part of the unit some gravels are aligned in horizontal bands. | | |

Supplementary Table 3. Sediment description and location of OSL samples of AQP.

4. Wadi Iddayyah 1 (IDD1) 25.112583° N 55.781389° E (top of section 135.7 m asl)

Wadi Iddayyah 1 (IDD1), is located on the edge of the main wadi channel and comprises 3.87 m of aeolian and fluvial sands (Supplementary Table 4, Supplementary Figure 4). The sequence shows several distinct sedimentation changes and thus potentially holds important information on the timing of dune mobilization and the associated interaction of aeolian and fluvial processes along the wadi. Unit 3 is composed of fluvial reworked aeolian sands which show an increased mean grain size, decreased sorting and increased skewness and kurtosis values compared to the underlying aeolian units. In addition, the fluvial reworked unit is also characterised by increased magnetic susceptibility, aluminium, iron and strontium values.

| Unit Number Depth (m) | Description | OSL depth below surface | Total height OSL sample (m asl) |
|--------------------------|---|----------------------------|---------------------------------------|
| Unit 1 3.27 to 3.87 m | Homogenous fine sand. The unit is interpreted as aeolian based on its sedimentological characteristics with a near symmetrical skewness and moderately well sorting. Section is unbottomed. | IDD1-2 at 0.3 m | IDD1-2 at 132.20 m |
| Unit 2 1.37 to 3.27 m | 2 sub-units of cross-bedded, aeolian sand with erosive contact to unit below. | | |
| Unit 3 0 to 1.37 m | Fluvially reworked, aeolian sand, with planar bedding and ophiolite, fine gravel stringers between 1.35 and 0.75 m, fining upwards to surface | IDD1-2 at 3.8 m | IDD1-1 at 135.67 m |

Supplementary Table 4. Sediment description and location of OSL samples of IDD1.





Supplementary Figure 4. Wadi Iddayyah 1 (IDD1) section showing profile and position of the OSL samples. Description of units in Table 4.

5. Wadi Iddayyah 2 (IDD2)

IDD2A 25.233400° N 55.670150° E (top of section 92.4 m asl) IDD2B 25.233983° N 55.672383° E (top of section 90.7 m asl) IDD2C 25.234317° N 55.671533° E (top of section 87.3 m asl)

Wadi Iddayyah 2 (IDD2), comprises a series of fluvial terraces which run along the right-hand side of a small distributary channel cut through the dunes away from the main wadi channel (Supplementary Figure 5). The terraces reach a combined total thickness of 2.80 m and comprise alternating units of aeolian sands and fluvially-derived/reworked silts (Supplementary Figure 5, Supplementary Tables 5, 6, 7).







Supplementary Figure 5. (a) Satellite image showing the location of Wadi Iddayyah 2 (IDD2) with respect to the main wadi channel, (b) Position of the three terraces (A, B and C) at IDD Sections at of IDD2 showing location OSL samples.

| Unit Number Depth (m) | Description | OSL depth below surface | Total height OSL sample (m asl) |
|--------------------------|---|----------------------------|---------------------------------------|
| Unit 1 0.26 to 0.45 m | Cross bedded, aeolian sand. Section is unbottomed. | IDD2A at 0.3 m | IDD2A at 92.10 m |
| Unit 2 0.16 to 0.26 m | Dark grey nodular fine-grained fluvial silts. | | |
| Unit 3 0.12 to 0.16 m | Horizontally bedded, aeolian sand. | | |
| Unit 4 0 to 0.12 m | Homogenous sand, most likely fluvial reworked aeolian sand. | | |

Supplementary Table 5. Sediment description and location of OSL samples of IDD 2A.

| Unit Number Depth (m) | Description | OSL depth below surface | Total height OSL sample (m asl) |
|--------------------------|--|----------------------------|---------------------------------------|
| Unit 1 | Horizontally bedded aeolian fine sand. Section | IDD2B at | IDD2B at |
| 0.90 to 1.10 m | is unbottomed. | 1.0 m | 89.10 m |
| Unit 2 | Cross bedded, aeolian fine sand with erosional | | |
| 0.78 to 0.90 m | contact to underlying unit. | | |
| Unit 3 | Homogenous fine sand, most likely fluvial | | |
| 0.66 to0.78 m | reworked aeolian sand. | | |
| Unit 4 | Harizantally hadded, eaclien fine and | | |
| 0.55 to 0.66 m | Honzontally bedded, aeollan line sand. | | |
| Unit 5 | Homogenous fine sand, most likely fluvial | | |
| 0 to 0.55 m | reworked aeolian sand. | | |

Supplementary Table 6. Sediment description and location of OSL samples of IDD2B.

Supplementary Table 7. Sediment description and location of OSL samples of IDD2C.

| Unit Number Depth (m) | Description | OSL depth below surface | Total height OSL sample (m asl) |
|--------------------------|--|----------------------------|---------------------------------------|
| Unit 1 1.17 to 1.25 m | Horizontally bedded sand with a small dark grey silt layer on top. The sand and the silt layer are fluvial. Section is unbottomed. | | |
| Unit 2 0.68 to 1.17 m | Homogenous sand fining up in dark grey nodular silt. The sand and silt layer are fluvial. | IDD2C-2 at 0.9 m | IDD2C-2 at 85.95 m |
| Unit 3 0.62 to 0.68 m | Horizontally bedded sand, more red than underlying units. Most likely aeolian sand. | | |
| Unit 4 0.30 to 0.62 m | Cross-bedded aeolian sand. | | |
| Unit 5 0 to 0.30 m | Homogenous fine sand, fluvially reworked aeolian sand. | IDD2C-1 at 0.2 m | IDD2C-1 at 86.63 m |

6. Sharjah Army Camp (SHAC) 25.309097° N 55.470903° E (top of section 21.0 m asl)

The SHAC site is located 10 km inland from the modern coastline to the West and approximately 45 km from Jebel Faya, which lies to the East (Supplementary Figure 6). The site is ~21 m asl and positioned in a low-lying area of former linear dunes trending NW-SE aligned with the modern day *shamal* winds. These low dunes were reworked in the later Holocene from larger Pleistocene linear dunes which trend SW-NE. The low linear dunes overlie a series of fluvial silts and sands which were most likely deposited at the distal end of Wadi Iddayyah. The course of Wadi Iddayyah is hard to trace in this area owing to large-scale property development and it is probable that the former course has been altered by dune emplacement in the later Pleistocene and Holocene with periodic channel flow along former interdunal areas.

The sampling site is located inside the former compound of a military camp, which was being re-developed for housing/commercial property. The site formerly contained a series of hardened military bunkers, which had subsequently been removed and in turn exposed a series of cuts through the underlying sediments. The upper sediments are disturbed and comprise re-worked materials from bulldozing which was only recognised fully in a desktop study after the site was visited (Supplementary Figure 6). Units 9-12 (0.85cm) from the original description are now known to represent reworked material and should not be considered as being in situ. The sediment sequence should only be considered as being in situ below this. The original sediment section description is given below along with additional notes to correct for the anthropogenic overburden. All sediments are described from the top downwards (Supplementary Figure 6, Supplementary Table 8).

| Unit Number Depth (m) | Sediment description | OSL sample depths (m) | |
|-----------------------------|---|-------------------------------|--|
| Units 9-12 0-0.85 m | Disturbed/bulldozed sediment comprising reworked fluvial silts and sands with some gravels | SHAC9, 10, 11 (reject) | |
| Unit 8 0.85-1.05 m | White, fine gained silty-sand unit (0.2 m thick). Fining up sequence with clay/silt with mud curls/desiccation at the top of the unit. Erosive, sharp contact with unit below. | SHAC8 (not dated) | |
| Unit 7 1.05-1.90 m | Olive, coarse – medium fluvial sand unit (0.85 m thick), relatively homogenous with some white, silt rip-up clasts present. Sharp (erosion) contact with unit below. | | |
| Unit 6 1.90-2.20 m | White, silts with fine sand unit (up to 0.3 m thick). Sharp contact with erosion into unit below. Some variation in unit thickness as a result. | SHAC6 2.00 m (dated) | |
| Unit 5 2.20-3.04 m | Olive, coarse-medium poorly sorted fluvial sands with numerous, large rip up clasts up to 20 cm in size. Traces of ophiolite gravel present. Sharp, erosive contact with underlying unit. | | |
| Unit 4 3.04-3.37 m | White, fine silt unit (0.33 m) with rip-up clasts up to 5 cm in size. Fining up at top of unit and cemented. | SHAC4 3.3 m (dated) | |
| Unit 3 3.37-3.80 m | Coarse olive fluvial reworked aeolian sand unit (0.43 m thick) with ophiolite gravels up to 3 cm in size. Erosive contact with unit below. | SHAC3 3.6 m (not dated) | |
| Unit 2 3.80–4.06 m | Fine, white cemented fluvial silts and fine sands. Erosive contact with unit below. | SHAC2 3.9 m (dated) | |
| Unit 1 4.06-4.30 m | Coarse olive fluvial sands. Homogenous unit. Section unbottomed. | SHAC1 4.3 m (not dated) | |

Supplementary Table 8. Sediment description and location of OSL samples of SHAC.











Clay/Silt fS mS cS G

Supplementary Figure 6. Location of SHAC sampling site showing the effect of development in the region between 2004 and 2017. SW-NE trending linear dunes are clearly shown in 2004 image along with distal end of Wadi Iddayyah drainage which has been reconfigured by dunes. Sediment section at SHAC, note planer bedded fluvial silt units (middle left hand image), which are overlain by reworked sediments on top with close up showing convoluted and deformed beds due to pressure from bulldozing. Below, SHAC profile showing the location OSL samples (lower).





















 $D_{e}\left(Gy\right)$



Supplementary Table 9. Number of measured (n_{meas}), accepted (n_{acc}) and rejected (n_{rej}) aliquots for SAR and SM (in parentheses) of all samples and reasons for rejection are given.

| Sample code | n _{acc} /n _{meas} | n _{rej} | 1. Depletion by IR >20% | 2. 0 Gy dose >5% of L _n /T _n | 3. FOM >10 | 4. L _n /T _n in saturation* |
|----------------|-------------------------------------|------------------|----------------------------|---|---------------|--|
| FDU2 | 7/7 (33/33) | - (-) | - (-) | - (-) | - (-) | - (-) |
| FDU3 | 9/10 (33/33) | 1 (-) | - (-) | - (-) | - (-) | 1 (-) |
| FDU4 | 7/7 (31/31) | - (-) | - (-) | - (-) | - (-) | - (-) |
| KAD1 | 10/10 (33/33) | - (-) | - (-) | - (-) | - (-) | - (-) |
| KAD3 | 8/9 (33/33) | 1 (-) | - (-) | - (-) | - (-) | 1 (-) |
| KAD7 | 8/8 (31/33) | - (2) | - (-) | - (-) | - (-) | - (2) |
| AQP1 | 9/9 (33/33) | - (-) | - (-) | - (-) | - (-) | - (-) |
| AQP2 | 10/10 (33/33) | - (-) | - (-) | - (-) | - (-) | - (-) |
| AQP3 | 9/10 (33/33) | 1 (-) | - (-) | - (-) | - (-) | 1 (-) |
| AQP4 | 7/7 (33/33) | - (-) | - (-) | - (-) | - (-) | - (-) |
| AQP5 | 9/10 (31/33) | 1 (2) | - (-) | - (-) | - (-) | 1 (2) |
| IDD1-1 | 7/7 (30/33) | - (3) | - (-) | - (-) | - (-) | -(3) |
| IDD1-2 | 4/9 (13/41) | 5 (28) | - (-) | - (-) | - (-) | 5 (28) |
| IDD2A | 9/9 (33/33) | - (-) | - (-) | - (-) | - (-) | - (-) |
| IDD2B | 9/9 (33/33) | - (-) | - (-) | - (-) | - (-) | - (-) |
| IDD2C-1 | 7/7 (33/33) | - (-) | - (-) | - (-) | - (-) | - (-) |
| IDD2C-2 | 9/10 (33/33) | 1 (-) | - (-) | 1 (-) | - (-) | - (-) |
| SHAC2 | 6/11 (14/43) | 5 (29) | 2 (-) | - (-) | - (-) | 3 (29) |
| SHAC4 | 8/12 (31/34) | 4 (3) | - (-) | - (-) | - (-) | 4 (3) |
| SHAC5 | 7/9 (32/33) | 2 (1) | 2 (-) | - (-) | - (-) | - (1) |
| SHAC6 | 7/12 (29/34) | 5 (5) | 1 (-) | - (-) | - (-) | 4 (5) |
| SHAC7 | 8/10 (33/33) | 2 (-) | - (-) | 1 (-) | 1 (-) | - (-) |

* Only rejection criteria that was also applied to the SM dataset.

Supplementary Table 10. Dosimetric data for all samples.

| Sample | Depth | Radionuclide concentration | | | DR _{cosmic} | DR |
|---------|-------|----------------------------|-----------------|-----------------|------------------------|-----------------|
| code | (m) | U (ppm) | Th (ppm) | K (%) | (Gy ka ⁻¹) | (Gy ka⁻¹) |
| FDU2 | 2.2 | 0.69 ± 0.05 | 1.04 ± 0.10 | 0.68 ± 0.06 | 0.15 ± 0.02 | 1.02 ± 0.05 |
| FDU3 | 3.0 | 0.77 ± 0.06 | 1.16 ± 010 | 0.77 ± 0.08 | 0.13 ± 0.01 | 1.12 ± 0.07 |
| FDU4 | 3.6 | 0.74 ± 0.06 | 0.99 ± 0.10 | 0.89 ± 0.06 | 0.12 ± 0.01 | 1.19 ± 0.06 |
| | | | | | | |
| KAD1 | 10.0 | 0.78 ± 0.05 | 0.33 ± 0.04 | 0.09 ± 0.01 | 0.06 ± 0.01 | 0.35 ± 0.02 |
| KAD3 | 6.5 | 0.53 ± 0.04 | 0.38 ± 0.04 | 0.09 ± 0.01 | 0.09 ± 0.01 | 0.33 ± 0.02 |
| KAD7 | 0.5 | 0.65 ± 0.05 | 0.29 ± 0.04 | 0.08 ± 0.01 | 0.19 ± 0.02 | 0.44 ± 0.03 |
| | | | | | | |
| AQP1 | 1.9 | 1.06 ± 0.07 | 1.45 ± 0.12 | 0.78 ± 0.05 | 0.16 ± 0.02 | 1.23 ± 0.07 |
| AQP2 | 3.4 | 0.96 ± 0.06 | 1.58 ± 0.10 | 0.82 ± 0.08 | 0.13 ± 0.01 | 1.22 ± 0.08 |
| AQP3 | 3.7 | 1.00 ± 0.07 | 1.53 ± 0.10 | 0.85 ± 0.06 | 0.12 ± 0.01 | 1.26 ± 0.06 |
| AQP4 | 4.1 | 0.87 ± 0.06 | 1.16 ± 0.10 | 0.76 ± 0.05 | 0.12 ± 0.01 | 1.11 ± 0.05 |
| AQP5 | 4.8 | 0.70 ± 0.05 | 1.09 ± 0.10 | 0.88 ± 0.09 | 0.11 ± 0.01 | 1.17 ± 0.08 |
| | 0.2 | $1 12 \pm 0.09$ | 1 70 ± 0 12 | 0.71 + 0.06 | 0.20 ± 0.02 | 1 25 ± 0 11 |
| | 0.3 | 1.12 ± 0.08 | 1.78 ± 0.12 | 0.71 ± 0.06 | 0.20 ± 0.02 | 1.25 ± 0.11 |
| IDD1-2 | 3.8 | 0.98 ± 0.07 | 1.53 ± 0.12 | 0.85 ± 0.09 | 0.12 ± 0.01 | 1.25 ± 0.09 |
| IDD2A | 0.3 | 1.18 ± 0.08 | 1.53 ± 0.12 | 0.69 ± 0.07 | 0.20 ± 0.02 | 1.23 ± 0.07 |
| | | | | | | |
| IDD2B | 1.0 | 1.30 ± 0.09 | 1.82 ± 0.15 | 0.65 ± 0.06 | 0.17 ± 0.02 | 1.12 ± 0.07 |
| 100201 | 0.2 | 1 26 + 0.00 | 1 20 + 0 10 | | 0.21 + 0.02 | 1 12 + 0.00 |
| IDD2C-1 | 0.2 | 1.26 ± 0.08 | 1.38 ± 0.10 | 0.55 ± 0.06 | 0.21 ± 0.02 | 1.12 ± 0.06 |
| IDD2C-2 | 0.9 | 1.25 ± 0.08 | 1.92 ± 0.15 | 0.73 ± 0.05 | 0.18 ± 0.02 | 1.28 ± 0.07 |
| SHAC2 | 4.3 | 1.53 ± 0.09 | 1.01 ± 0.07 | 0.43 ± 0.05 | 0.11 ± 0.01 | 0.96 ± 0.07 |
| SHAC4 | 3.4 | 1.65 ± 0.10 | 1.26 ± 0.10 | 0.44 ± 0.05 | 0.13 ± 0.01 | 1.03 ± 0.12 |
| SHAC5 | 2.4 | 1.31 ± 0.09 | 1.60 ± 0.12 | 0.53 ± 0.05 | 0.14 ± 0.01 | 1.07 ± 0.17 |
| SHAC6 | 2.0 | 1.65 ± 0.11 | 1.33 ± 0.12 | 0.50 ± 0.04 | 0.15 ± 0.02 | 1.12 ± 0.10 |
| SHAC7 | 1.8 | 1.32 ± 0.08 | 1.60 ± 0.12 | 0.57 ± 0.04 | 0.15 ± 0.02 | 1.13 ± 0.22 |