

# Aggregator

$$w = \sum w_i$$

$$Enc(w) = \prod Enc(w_i)$$

ZKP

$$(w, \pi) \quad (w_i, Enc(w_i))_i, Enc(w), \pi$$

$$(w_1, Enc(w_1), r_1, sig_1) \quad (w_n, Enc(w_n), r_n, sig_n)$$

$$(w_i, Enc(w_i), r_i, sig_i)$$



Client<sub>1</sub>

...



Client<sub>i</sub>

...



Client<sub>n</sub>



Miner<sub>1</sub>

...



Miner<sub>m</sub>

verify  
include  
on-chain

$$H(Enc(w))$$

$$H(Enc(w))$$

check  $H(Enc(w))$

# blockchain