

Fig. S1. Detection of *P. aeruginosa* **AQ signaling molecules by Thin-Layer Chromatography** (TLC). Two microliters of acidified ethyl acetate extracts from LB (control) or from cell-free culture supernatants of *P. aeruginosa* PA14 *pqsA*, *pqsH*, *pqsL* mutants or PA14 wt or PQS and HHQ standards (20 nmol) were spotted on TLC plate and migrated in a mixture of dichloromethane:methanol (95:5) prior to visualization at 312 nm.

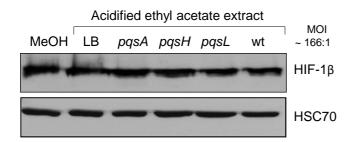
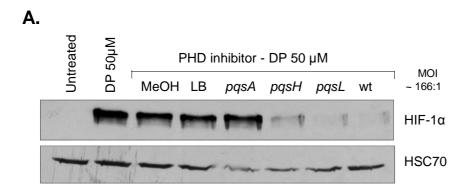


Fig. S2. *P. aeruginosa* **AQ signaling molecules do not affect HIF-1β protein levels.** Expression of HIF-1β (from BD transduction Laboratories - 611078 - Clone 29) and HSC70 (loading control) proteins in airway epithelial cells (IB3-1 cells) treated with methanol (MeOH) or acidified ethyl acetate extracts from LB (control) or from cell-free culture supernatants of *P. aeruginosa* PA14 *pqsA*, *pqsH*, *pqsL* mutants or PA14 wt at a dilution corresponding to a MOI of 166:1 for 16 h.



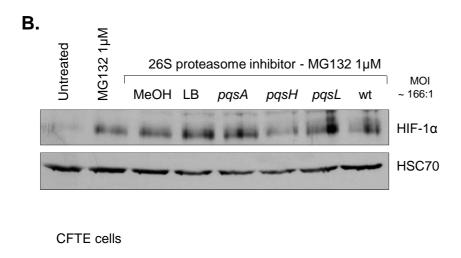
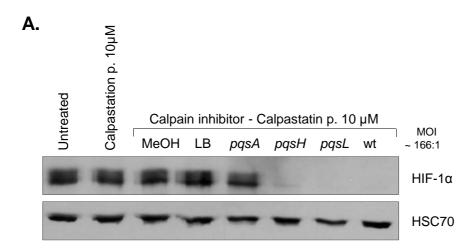


Fig. S3. *P. aeruginosa* AQ signaling molecules mediate HIF-1 α degradation via a PHD-independent but 26S proteasome-dependent mechanism in CFTE cells. Expression of HIF-1 α and HSC70 (loading control) proteins in airway epithelial cells (CFTE cells) untreated or treated with the PHD inhibitors A. 2,2'-dipyridyl DP (50 μ M) or with the 26S proteasome inhibitors B. Z-Leu-Leu-Leu-al MG132 (1 μ M) alone or in association with methanol (MeOH), acidified ethyl acetate from LB (control) or from cell-free culture supernatants of *P. aeruginosa* PA14 *pqsA*, *pqsH*, pqsL mutants or PA14 wt at a dilution corresponding to a MOI of 166:1 for 16 h.



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Fig. S4. *P. aeruginosa* AQ signaling molecules mediate HIF-1 α degradation through a calpain-independent mechanism. Expression of HIF-1 α and HSC70 (loading control) proteins in airway epithelial cells (IB3-1 cells) untreated or treated with calpain inhibitors A. calpastatin peptide (10 μ M) or B. N-Acetyl-Leu-Methional (ALLM) (25 μ M) alone or in association with methanol (MeOH), acidified ethyl acetate from LB (control) or from cell-free culture supernatants of *P. aeruginosa* PA14 *pqsA*, *pqsH*, pqsL mutants or PA14 wt at a dilution corresponding to a MOI of 166:1 for 16 h.