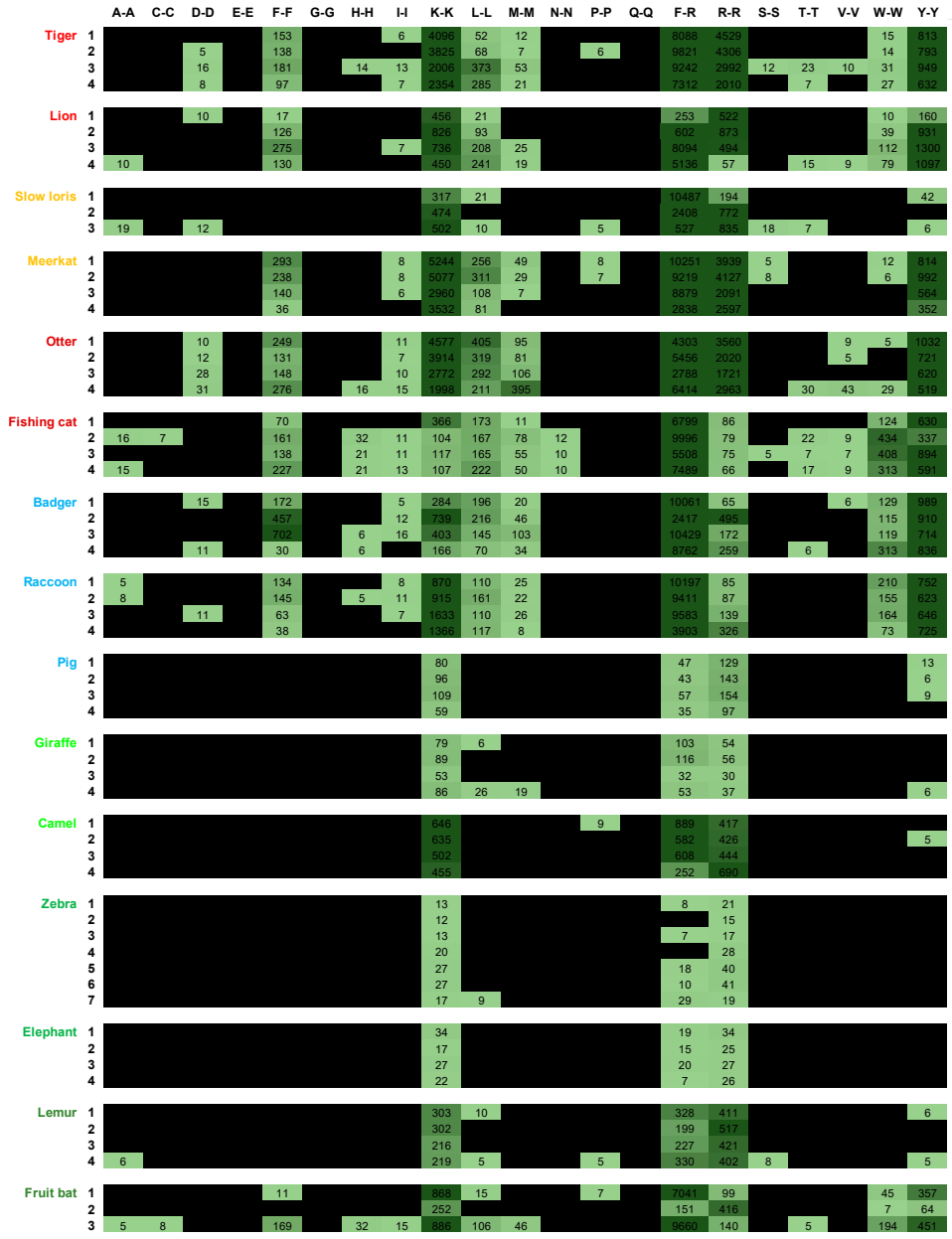
Supplementary data



Supplemental Figure S1. Heat map of the 21 FRET peptide substrates screened with feces from zoo animal species with different diet requirements. Color scheme: black = lack of activity (F/min < 5); light green = low activity (F/min = 5 – 50); medium green = moderate activity (F/min = 51 – 500); dark green = high activity (F/min > 500).

Supplemental Table S1. Characteristics of the animals from which fecal samples were collected in this study.

	Animal species	No. of animals in the enclosure	No. of fecal samples collected	Provided diet	Sub-group †	Origin
Carnivore	Tiger (*Panthera tigris altaica*)	2	4	Rabbit, horse meat and beef, goat, goose, chicken	n.a.	Dierenpark Amersfoort
	Lion (*Panthera leo*)	3	4	Rabbit, horse meat and beef, goat, goose, chicken	n.a	Dierenpark Amersfoort
	Slow loris (*Nycticebus pygmaeus*)	4	3	Mealworm, lori nectar, vitamin powder, endive, broccoli, chicory, cricket, morio worm, wax moth larvae	Insectivore	Dierenpark Amersfoort
	Meerkat (*Suricata suricatta*)	7	4	Omnivore pellet, chicory, cricket, egg, mealworm, mice, wax moth larvae, day-old chicken, morio worm, cockroach	Insectivore	Dierenpark Amersfoort
	Asian small clawed otter (*Aonyx cinerea*)	4	4	Roach, cat pellet, crab, shrimp, snail, fish-eater-supplement	Piscivore	Dierenpark Amersfoort
	Fishing cat (*Prionailurus viverrinus*)	2	4	Rabbit, guinea pig, freshwater fish, rat, mice	Piscivore	Diergaarde Blijdorp
Omnivore	Raccoon (*Procyon lotor*)	6	4	Small fish, chicken, egg, herring, noodle bowl of mussels with shell, omnivore pellets, mix of vegetables, fruits, insects, nuts, and seeds	n.a.	Diergaarde Blijdorp
	Badger (*Meles meles*)	2	4	Mice, earthworm, walnut, mealworm,	n.a.	Dierenpark Amersfoort

				sunflower seeds, day-old chicken, morio worm, quail		
	Bentheim black pied pig (*Sus scrofa domesticus*)	2	4	Celeriac, parsnip, endive, pig pellets	n.a.	Dierenpark Amersfoort
Herbivore	Giraffe (*Giraffa camelopardalis*)	4	4	Boskos, pellet, alfalfa hay, fresh browse	Ruminant/ Fore-gut fermenter	Dierenpark Amersfoort
	Camel (*Camelus bactrianus*)	3	4	Alpaca pellets, grass hay	Ruminant/ Fore-gut fermenter	Dierenpark Amersfoort
	Zebra (*Equus grevyi*)	3	7	Herbivore pellets, grass hay	Non-ruminant/ Hind-gut fermenter	Dierenpark Amersfoort
	Elephant (*Elephas maximus*)	5	4	Elephant pellets, beetroot, chicory, training biscuit, grass hay, straw, fresh browse	Non-ruminant/ Hind-gut fermenter	Dierenpark Amersfoort
	Ring-tailed lemur (*Lemur catta*)	11	4	Primate leaf-eater pellet, tomato, broccoli, celery, turnip, red pepper, endive	Frugivore	Dierenpark Amersfoort
	Fruit bat (*Rousettus aegyptiacus*)	170	3	Tomato, apple, pepper, bat nectar	Frugivore	Dierenpark Amersfoort

[†] n.a.: not applicable.