

Table S.1. Kynurenine Pathway Metabolite Concentrations in *acmsd*^{+/+} and *acmsd*^{-/-} Zebrafish Tissues

Sample	Kynurenine	Kynurenic Acid	3-Hydroxykynurenine	Quinolinic Acid	Kynurenic Acid/Kynurenine	3-Hydroxykynurenine /Kynurenine
WT Liver						
<i>acmsd</i> ^{+/+} 1	9234	9.84	161	111	0.001066	0.017436
<i>acmsd</i> ^{+/+} 2	8641	2.50	189	75.2	0.000289	0.021872
<i>acmsd</i> ^{+/+} 3	8453	10.6	117	80.0	0.001254	0.013841
<i>acmsd</i> ^{+/+} 4	8641	27.9	118	76.4	0.003229	0.013656
<i>acmsd</i> ^{+/+} 5	14575	16.4	254	123	0.001125	0.017427
Mutant Liver						
<i>acmsd</i> ^{-/-} 1	5112	21.7	136	57907	0.004245	0.026604
<i>acmsd</i> ^{-/-} 2	1301	2.30	61.8	52141	0.001768	0.047502
<i>acmsd</i> ^{-/-} 3	5611	21.4	146	61834	0.003814	0.02602
<i>acmsd</i> ^{-/-} 4	2322	10.7	75.7	60915	0.004608	0.032601
<i>acmsd</i> ^{-/-} 5	4529	14.3	132	100271	0.003157	0.029146
WT Brain						
<i>acmsd</i> ^{+/+} 1	< LLOQ	< LLOQ	14.6	23.2		
<i>acmsd</i> ^{+/+} 2	< LLOQ	< LLOQ	10.6	18.8		
<i>acmsd</i> ^{+/+} 3	< LLOQ	< LLOQ	8.06	17.0		
<i>acmsd</i> ^{+/+} 4	< LLOQ	< LLOQ	7.39	11.1		
<i>acmsd</i> ^{+/+} 5	< LLOQ	< LLOQ	9.74	13.7		
Mutant Brain						
<i>acmsd</i> ^{-/-} 1	< LLOQ	< LLOQ	22.0	2030		
<i>acmsd</i> ^{-/-} 2	< LLOQ	< LLOQ	14.5	1454		
<i>acmsd</i> ^{-/-} 3	< LLOQ	< LLOQ	8.71	1220		
<i>acmsd</i> ^{-/-} 4	< LLOQ	< LLOQ	17.9	1805		
<i>acmsd</i> ^{-/-} 5	< LLOQ	< LLOQ	12.9	2858		
WT Larvae						
<i>acmsd</i> ^{+/+} 1	<LLOQ	<LLOQ	0.888	< LLOQ		
<i>acmsd</i> ^{+/+} 2	3.81	<LLOQ	0.751	< LLOQ		
<i>acmsd</i> ^{+/+} 3	2.89	<LLOQ	0.742	< LLOQ		
<i>acmsd</i> ^{+/+} 4	2.12	<LLOQ	0.565	< LLOQ		
<i>acmsd</i> ^{+/+} 5	<LLOQ	<LLOQ	0.502	< LLOQ		
Mutant Larvae						
<i>acmsd</i> ^{-/-} 1	<LLOQ	<LLOQ	0.478	91.9		
<i>acmsd</i> ^{-/-} 2	<LLOQ	<LLOQ	0.552	129		
<i>acmsd</i> ^{-/-} 3	<LLOQ	<LLOQ	0.300	197		
<i>acmsd</i> ^{-/-} 4	3.31	<LLOQ	0.913	133		
<i>acmsd</i> ^{-/-} 5	2.31	<LLOQ	0.565	183		

Table outlining the measured concentrations of kynurenine pathway metabolites from liver tissue or whole brains extracted from 9mpf zebrafish or 5dpf whole larvae (5 fish per biological replicate, combined from a single larval clutch). Adult values are given as ng/gram tissue. Larval values are given as ng/mL extract. LLOQ, lower limit of quantification.