

substrate	product	z-score	iron source	sulfur source
citrate	malate	2.083136	water	water
cis-aconita	oxaloaceta	2.299597	water	cystein
cis-aconita	malate	2.945607	water	DL-ethionine
cis-aconita	succinate	2.574464	water	NaHSO3
citrate	succinate	3.231133	water	NaHSO3
fumarate	fumarate	1.733918	water	NaHSO3
cis-aconita	alpha-keto	8.369609	water	(NH4)S2O8
cis-aconita	pyruvate	16.01778	water	(NH4)S2O8
cis-aconita	succinate	31.56759	water	(NH4)S2O8
citrate	alpha-keto	5.667225	water	(NH4)S2O8
citrate	oxaloaceta	Inf	water	(NH4)S2O8
citrate	succinate	10.27371	water	(NH4)S2O8
fumarate	pyruvate	4.09444	water	(NH4)S2O8
fumarate	succinate	6.91919	water	(NH4)S2O8
malate	oxaloaceta	2.84921	water	(NH4)S2O8
malate	pyruvate	29.30294	water	(NH4)S2O8
succinate	fumarate	Inf	water	(NH4)S2O8
succinate	oxaloaceta	Inf	water	(NH4)S2O8
citrate	pyruvate	1.970257	water	Na2SO3
succinate	succinate	2.205249	Fe Acetate	2-mercaptoethanol
succinate	succinate	2.388238	Fe Acetate	water
citrate	pyruvate	3.09905	Fe Acetate	cystein
fumarate	pyruvate	3.464526	Fe Acetate	cystein
succinate	succinate	2.091066	Fe Acetate	cystein
cis-aconita	oxaloaceta	2.058767	Fe Acetate	DMSO
succinate	pyruvate	2.849048	Fe Acetate	DMSO
succinate	succinate	2.42112	Fe Acetate	DMSO
cis-aconita	pyruvate	5.130571	Fe Acetate	NaHSO3
malate	malate	1.758471	Fe Acetate	NaHSO3
succinate	succinate	2.020232	Fe Acetate	NaHSO3
succinate	succinate	1.880554	Fe Acetate	methionine
cis-aconita	alpha-keto	2.050336	Fe Acetate	(NH4)S2O8
cis-aconita	pyruvate	4.554595	Fe Acetate	(NH4)S2O8
cis-aconita	succinate	21.23746	Fe Acetate	(NH4)S2O8
fumarate	pyruvate	3.482024	Fe Acetate	(NH4)S2O8
fumarate	succinate	2.692405	Fe Acetate	(NH4)S2O8
malate	pyruvate	13.81132	Fe Acetate	(NH4)S2O8
succinate	succinate	1.86147	Fe Acetate	Na2SO3
cis-aconita	oxaloaceta	2.275514	Fe Sulfide	2-mercaptoethanol
fumarate	malate	1.980317	Fe Sulfide	2-mercaptoethanol
citrate	pyruvate	3.988402	Fe Sulfide	cystein
succinate	pyruvate	2.985529	Fe Sulfide	cystein
cis-aconita	oxaloaceta	2.039302	Fe Sulfide	DL-ethionine
succinate	pyruvate	4.572125	Fe Sulfide	DMSO
cis-aconita	pyruvate	1.632976	Fe Sulfide	Homocysteic acid
citrate	succinate	2.185134	Fe Sulfide	NaHSO3

malate	oxaloaceta	1.927203	Fe Sulfide	NaHSO3
cis-aconita	alpha-keto	7.596838	Fe Sulfide	(NH4)S2O8
cis-aconita	pyruvate	17.81874	Fe Sulfide	(NH4)S2O8
cis-aconita	succinate	37.99382	Fe Sulfide	(NH4)S2O8
citrate	alpha-keto	9.410713	Fe Sulfide	(NH4)S2O8
citrate	oxaloaceta	Inf	Fe Sulfide	(NH4)S2O8
citrate	pyruvate	3.27692	Fe Sulfide	(NH4)S2O8
citrate	succinate	18.57722	Fe Sulfide	(NH4)S2O8
fumarate	oxaloaceta	1.774947	Fe Sulfide	(NH4)S2O8
fumarate	pyruvate	4.549378	Fe Sulfide	(NH4)S2O8
fumarate	succinate	4.958822	Fe Sulfide	(NH4)S2O8
malate	oxaloaceta	2.228762	Fe Sulfide	(NH4)S2O8
malate	pyruvate	26.34782	Fe Sulfide	(NH4)S2O8
succinate	oxaloaceta	Inf	Fe Sulfide	(NH4)S2O8
fumarate	oxaloaceta	1.609515	Fe Sulfide	Na2SO3
malate	oxaloaceta	1.65684	Fe Sulfide	Na2SO4
citrate	cis-aconita	2.581507	Fe(ClO4)2	water
cis-aconita	oxaloaceta	2.591562	Fe(ClO4)2	cystein
fumarate	pyruvate	2.729627	Fe(ClO4)2	cystein
cis-aconita	oxaloaceta	2.168955	Fe(ClO4)2	DL-ethionine
fumarate	malate	1.605663	Fe(ClO4)2	DL-ethionine
succinate	succinate	2.053947	Fe(ClO4)2	DMSO
cis-aconita	oxaloaceta	2.299597	Fe(ClO4)2	methionine
cis-aconita	oxaloaceta	2.448054	Fe(ClO4)2	(NH4)S2O8
cis-aconita	pyruvate	4.43773	Fe(ClO4)2	(NH4)S2O8
cis-aconita	succinate	11.38896	Fe(ClO4)2	(NH4)S2O8
fumarate	pyruvate	3.044584	Fe(ClO4)2	(NH4)S2O8
fumarate	succinate	2.543516	Fe(ClO4)2	(NH4)S2O8
malate	pyruvate	8.130529	Fe(ClO4)2	(NH4)S2O8
succinate	oxaloaceta	Inf	Fe(ClO4)2	(NH4)S2O8
succinate	pyruvate	2.223508	Fe(ClO4)2	(NH4)S2O8
cis-aconita	oxaloaceta	2.477085	Fe(ClO4)2	Na2SO4
cis-aconita	citrate	1.756857	Fe(ClO4)3	2-mercaptoethanol
cis-aconita	oxaloaceta	2.275514	Fe(ClO4)3	2-mercaptoethanol
cis-aconita	succinate	1.762651	Fe(ClO4)3	water
citrate	pyruvate	2.934862	Fe(ClO4)3	cystein
fumarate	malate	1.766229	Fe(ClO4)3	cystein
fumarate	pyruvate	3.324545	Fe(ClO4)3	cystein
cis-aconita	oxaloaceta	2.517004	Fe(ClO4)3	NaHSO3
cis-aconita	alpha-keto	3.861778	Fe(ClO4)3	(NH4)S2O8
cis-aconita	pyruvate	2.530331	Fe(ClO4)3	(NH4)S2O8
cis-aconita	succinate	27.90202	Fe(ClO4)3	(NH4)S2O8
citrate	succinate	3.811447	Fe(ClO4)3	(NH4)S2O8
fumarate	pyruvate	4.181928	Fe(ClO4)3	(NH4)S2O8
fumarate	succinate	4.404625	Fe(ClO4)3	(NH4)S2O8
malate	oxaloaceta	1.632577	Fe(ClO4)3	(NH4)S2O8
succinate	oxaloaceta	Inf	Fe(ClO4)3	(NH4)S2O8

cis-aconita	oxaloaceta	2.156418	Fe(ClO <sub>4</sub> ) <sub>3</sub>	Na <sub>2</sub> SO <sub>4</sub>
succinate	succinate	2.231142	FeCl <sub>2</sub>	2-mercaptoethanol
cis-aconita	alpha-keto	1.747044	FeCl <sub>2</sub>	water
cis-aconita	oxaloaceta	2.001693	FeCl <sub>2</sub>	water
succinate	succinate	2.01049	FeCl <sub>2</sub>	water
fumarate	pyruvate	2.41467	FeCl <sub>2</sub>	cystein
succinate	succinate	1.984126	FeCl <sub>2</sub>	cystein
succinate	succinate	2.186381	FeCl <sub>2</sub>	DL-ethionine
succinate	succinate	2.684251	FeCl <sub>2</sub>	DMSO
cis-aconita	oxaloaceta	1.991466	FeCl <sub>2</sub>	NaHSO <sub>3</sub>
cis-aconita	oxaloaceta	2.429249	FeCl <sub>2</sub>	methionine
succinate	succinate	2.27257	FeCl <sub>2</sub>	methionine
cis-aconita	pyruvate	2.405118	FeCl <sub>2</sub>	(NH <sub>4</sub> ) <sub>2</sub> S <sub>2</sub> O <sub>8</sub>
cis-aconita	succinate	10.00242	FeCl <sub>2</sub>	(NH <sub>4</sub> ) <sub>2</sub> S <sub>2</sub> O <sub>8</sub>
fumarate	pyruvate	3.587009	FeCl <sub>2</sub>	(NH <sub>4</sub> ) <sub>2</sub> S <sub>2</sub> O <sub>8</sub>
fumarate	succinate	2.808207	FeCl <sub>2</sub>	(NH <sub>4</sub> ) <sub>2</sub> S <sub>2</sub> O <sub>8</sub>
fumarate	succinic sei	2.010532	FeCl <sub>2</sub>	(NH <sub>4</sub> ) <sub>2</sub> S <sub>2</sub> O <sub>8</sub>
malate	pyruvate	8.795134	FeCl <sub>2</sub>	(NH <sub>4</sub> ) <sub>2</sub> S <sub>2</sub> O <sub>8</sub>
cis-aconita	oxaloaceta	1.936372	FeCl <sub>2</sub>	Na <sub>2</sub> SO <sub>3</sub>
malate	pyruvate	1.785136	FeCl <sub>2</sub>	Na <sub>2</sub> SO <sub>3</sub>
succinate	succinate	2.339892	FeCl <sub>2</sub>	Na <sub>2</sub> SO <sub>3</sub>
cis-aconita	oxaloaceta	2.132665	FeCl <sub>2</sub>	Na <sub>2</sub> SO <sub>4</sub>
succinate	succinate	1.608008	FeCl <sub>2</sub>	Na <sub>2</sub> SO <sub>4</sub>
cis-aconita	oxaloaceta	2.186769	FeCl <sub>3</sub>	2-mercaptoethanol
cis-aconita	fumarate	2.086236	FeCl <sub>3</sub>	cystein
fumarate	pyruvate	3.167067	FeCl <sub>3</sub>	cystein
cis-aconita	oxaloaceta	2.087468	FeCl <sub>3</sub>	Homocysteic acid
cis-aconita	alpha-keto	1.971397	FeCl <sub>3</sub>	(NH <sub>4</sub> ) <sub>2</sub> S <sub>2</sub> O <sub>8</sub>
cis-aconita	pyruvate	5.270392	FeCl <sub>3</sub>	(NH <sub>4</sub> ) <sub>2</sub> S <sub>2</sub> O <sub>8</sub>
cis-aconita	succinate	18.76479	FeCl <sub>3</sub>	(NH <sub>4</sub> ) <sub>2</sub> S <sub>2</sub> O <sub>8</sub>
fumarate	oxaloaceta	1.616408	FeCl <sub>3</sub>	(NH <sub>4</sub> ) <sub>2</sub> S <sub>2</sub> O <sub>8</sub>
fumarate	pyruvate	6.754076	FeCl <sub>3</sub>	(NH <sub>4</sub> ) <sub>2</sub> S <sub>2</sub> O <sub>8</sub>
fumarate	succinate	5.016723	FeCl <sub>3</sub>	(NH <sub>4</sub> ) <sub>2</sub> S <sub>2</sub> O <sub>8</sub>
malate	pyruvate	5.733205	FeCl <sub>3</sub>	(NH <sub>4</sub> ) <sub>2</sub> S <sub>2</sub> O <sub>8</sub>
succinate	oxaloaceta	Inf	FeCl <sub>3</sub>	(NH <sub>4</sub> ) <sub>2</sub> S <sub>2</sub> O <sub>8</sub>
succinate	pyruvate	2.0131	FeCl <sub>3</sub>	(NH <sub>4</sub> ) <sub>2</sub> S <sub>2</sub> O <sub>8</sub>
cis-aconita	oxaloaceta	2.076252	Ferrocene	2-mercaptoethanol
cis-aconita	oxaloaceta	1.819256	Ferrocene	water
malate	oxaloaceta	2.256491	Ferrocene	water
cis-aconita	oxaloaceta	2.028745	Ferrocene	cystein
succinate	pyruvate	3.207311	Ferrocene	cystein
cis-aconita	pyruvate	2.336252	Ferrocene	NaHSO <sub>3</sub>
cis-aconita	succinate	1.613695	Ferrocene	NaHSO <sub>3</sub>
fumarate	fumarate	3.131835	Ferrocene	NaHSO <sub>3</sub>
cis-aconita	alpha-keto	4.206617	Ferrocene	(NH <sub>4</sub> ) <sub>2</sub> S <sub>2</sub> O <sub>8</sub>
cis-aconita	pyruvate	19.32129	Ferrocene	(NH <sub>4</sub> ) <sub>2</sub> S <sub>2</sub> O <sub>8</sub>
cis-aconita	succinate	35.51742	Ferrocene	(NH <sub>4</sub> ) <sub>2</sub> S <sub>2</sub> O <sub>8</sub>

citrate	alpha-keto	5.26428	Ferrocene	(NH4)S2O8
citrate	oxaloaceta	Inf	Ferrocene	(NH4)S2O8
citrate	succinate	16.43508	Ferrocene	(NH4)S2O8
fumarate	pyruvate	5.844201	Ferrocene	(NH4)S2O8
fumarate	succinate	4.867834	Ferrocene	(NH4)S2O8
fumarate	succinic se	1.863777	Ferrocene	(NH4)S2O8
malate	pyruvate	9.790063	Ferrocene	(NH4)S2O8
succinate	fumarate	Inf	Ferrocene	(NH4)S2O8
succinate	oxaloaceta	Inf	Ferrocene	(NH4)S2O8
cis-aconita	oxaloaceta	1.746018	Ferrocene	Na2SO4